

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Michael Astorino Examiner #: 74962 Date: 3/14/05
 Art Unit: 3236 Phone Number 30 X-14723 Serial Number: 10/622,558
 Mail Box and Bldg/Room Location: RND 7A48 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

1) Dementia or Alzheimer's / Alzheimer's or Retrogenesis / Retrogenic or Cognition / Cognitive

2) FAST ; BCI ; GUS ; (Functional Assessment Staging), (Brief Cognitive Rating), (Global Deterioration Scale)

3) Axioms ; Axioms ; Postulate ; Postulates ; Axiom ; Axioms

4) Research ; Developmental / Developmental / Developmental / Developmental / Developmental

→ Search #1 2 AND 3

Search #2 : 1, 2, 3, 4

Rec'd 3/14/05 9:53a L.S.

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: John Sims

NA Sequence (#) _____

STN _____

Searcher Phone #: 23507

AA Sequence (#) _____

Dialog _____

Searcher Location: RND 8B35

Structure (#) _____

Questel/Orbit _____

Date Searcher Picked Up: _____

Bibliographic _____

Dr Link _____

Date Completed: 3/14/05

Litigation _____

Lexis/Nexis _____

Searcher Prep & Review Time: _____

Fulltext _____

Sequence Systems _____

Clerical Prep Time: _____

Patent Family _____

WWW/Internet _____

Online Time: _____

Other _____

Other (specify) _____

Freeform Search

Database:

US Pre-Grant Publication Full-Text Database

US Patents Full-Text Database

US OCR Full-Text Database

EPO Abstracts Database

JPO Abstracts Database

Derwent World Patents Index

IBM Technical Disclosure Bulletins

Term:

L35 and ((stage or staging or scoring or score) same (developmental adj ages))

Display:

10

Documents in Display Format:

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21

Generate:

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DATE: Monday, March 14, 2005 [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; PLUR=YES; OP=OR</i>			
<u>L40</u>	L39 and (axiom postulate caveat)	0	<u>L40</u>
<u>L39</u>	L35 and ((stage or staging or scoring or score) same (developmental adj ages))	12	<u>L39</u>
<u>L38</u>	L35 and (stage or staging or scoring or score)	23	<u>L38</u>
<u>L37</u>	L35 and reisberg	0	<u>L37</u>
<u>L36</u>	L35 and (reisberg or Auer).in.	0	<u>L36</u>
<u>L35</u>	L34 and (dementia or cogniti\$ or alzheime\$)	25	<u>L35</u>
<u>L34</u>	(developmental adj ages)	69	<u>L34</u>
<u>L33</u>	128 and (600/\$.ccls. or 128/\$.ccls.)	22	<u>L33</u>
<u>L32</u>	128 and (600/\$.ccls. or 128?\$.ccls.)	22	<u>L32</u>
<u>L31</u>	(dementia or cogniti\$ or alzheime\$) and (GDS).clm.	24	<u>L31</u>
<u>L30</u>	L29	30	<u>L30</u>
<i>DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L29</u>	(dementia or cogniti\$ or alzheime\$) and (BCRS GDS).clm.	67	<u>L29</u>
<u>L28</u>	(dementia or cogniti\$ or alzheime\$) and (FAST BCRS GDS).clm.	228	<u>L28</u>

<u>L27</u>	L2 and (axiom postulate caveat)	0	<u>L27</u>
<u>L26</u>	L25 and (axiom postulate caveat)	0	<u>L26</u>
<u>L25</u>	retrogen\$ and dementia	5	<u>L25</u>
<u>L24</u>	L23 and l12 and l17	1	<u>L24</u>
<u>L23</u>	brief adj cognit\$ adj rating	4	<u>L23</u>
<u>L22</u>	L21 l18	49	<u>L22</u>
<u>L21</u>	l20 l17	49	<u>L21</u>
<u>L20</u>	l2 l14	40	<u>L20</u>
<u>L19</u>	l2 and l14	9	<u>L19</u>
<u>L18</u>	L17 and (dementia or cogniti\$ or alzheime\$)	12	<u>L18</u>
<u>L17</u>	functional adj assessment adj staging	12	<u>L17</u>
<u>L16</u>	L14 and (axioms postulates caveats)	0	<u>L16</u>
<u>L15</u>	L14 and (axiom postulate caveat)	0	<u>L15</u>
<u>L14</u>	l9 5826585.pn.	33	<u>L14</u>
<u>L13</u>	l9 5826585.pn	32	<u>L13</u>
<u>L12</u>	global adj deterioration adj scale	23	<u>L12</u>
<u>L11</u>	retrogenesis	4	<u>L11</u>
<u>L10</u>	retrognesis	0	<u>L10</u>
<u>L9</u>	l8 l4 l3	32	<u>L9</u>
<u>L8</u>	l5 l6 l7	20	<u>L8</u>
<u>L7</u>	(3322115)! [pn]	2	<u>L7</u>
<u>L6</u>	(5263492 5469862)! [pn]	4	<u>L6</u>
<u>L5</u>	(4416293 4586515 5080109 5203346 5305764 5365941)! [pn]	14	<u>L5</u>
<u>L4</u>	(5082446 5150716 5782777 6067986).uref.	5	<u>L4</u>
<u>L3</u>	L2 and (fast bcrs gds)	7	<u>L3</u>
<u>L2</u>	(reisberg or Auer).in. and (dementia or cogniti\$ or alzheime\$)	16	<u>L2</u>
<u>L1</u>	6659947.pn.	2	<u>L1</u>

END OF SEARCH HISTORY

Google

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[Universities: Stanford, Brown, BYU, & more](#) - Narrow your search to a specific school's website

? display sets

Set	Items	Description
S1	689059	DEMENTIA? OR ALZHEIMER? ? OR RETROGEN? OR COGNITI?
S2	111318	(FAST OR FUNCTIONAL()ASSESSMENT?()STAG???) OR (BCRS OR BRI- EF()COGNITIVE()RATING?) OR (GDS OR GLOBAL()DETERIORATION?()SC- ALE? ?)
S3	50167	AXIOM? ? OR POSTULAT?? OR CAVEAT? ?
S4	23460	REISBERG? OR (DEVELOPMENTAL() (AGE? ? OR STAG??? OR SCOR???-))
S5	282	S2(S)S3
S6	13	S1 AND S2 AND S3 AND S4
S7	282	S5
S8	267	RD (unique items)
S9	13	S6
S10	13	RD (unique items)

? show files

File 1:ERIC 1966-2004/Jul 21
(c) format only 2004 The Dialog Corporation
File 7:Social SciSearch(R) 1972-2005/Mar W1
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(c) 2005 The HW Wilson Co
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(c) 2005 Public Affairs Information Service
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File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
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File 155:MEDLINE(R) 1951-2005/Mar W2
(c) format only 2005 The Dialog Corp.
File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/Feb W2
(c) 2005 ESPICOM Bus.Intell.

? display sets

Set	Items	Description
S1	831000	DEMENTIA? OR ALZHEIMER? ? OR RETROGEN? OR COGNITI?
S2	1012164	(FAST OR FUNCTIONAL()ASSESSMENT()STAG???) OR (BCRS OR BRIE- F()COGNITIVE()RATING) OR (GDS OR GLOBAL()DETERIORAT?()SCALE? - ?)
S3	233675	AXIOM? ? OR POSTULAT?? OR CAVEAT? ?
S4	82601	REISBERG OR DEVELOPMENTAL()(AGES? ? OR STAG??? OR SCOR???)
S5	2938	S2(S)S3
S6	0	S1 AND S2 AND S3 AND S4
S7	42	S1 AND S5
S8	1804	S1 AND S4
S9	47	S1 AND (S2 AND S3)
S10	5	S1 AND (S3 AND S4)
S11	71	S1 AND (S2 AND S4)
S12	2938	*deleted* S2 AND S5
S13	2938	*deleted* S3 AND S5
S14	5	S4 AND S5
S15	118	S7 OR S9 OR S11
S16	63	RD (unique items)
S17	10	S10 OR S14
S18	7	RD (unique items)
S19	63	S16 NOT S17
S20	0	S5 AND S1 AND S4

? t s19/3,k/all

19/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

7906786 INSPEC Abstract Number: C2004-04-7820-058

Title: Integration of language and cognition at pre-conceptual level

Author(s): Perlovsky, L.I.

Author Affiliation: Hanscom AFB, MA, USA

Conference Title: International Conference on Integration of Knowledge Intensive Multi-Agent Systems. KIMAS'03: Modeling, Exploration, and Engineering (Cat. No.03EX716) p.280-5

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 2003 Country of Publication: USA xiii+775 pp.

ISBN: 0 7803 7958 6 Material Identity Number: XX-2003-03209

U.S. Copyright Clearance Center Code: 0-7803-7958-6/03/\$17.00

Conference Title: International Conference on Integration of Knowledge Intensive Multi-Agent Systems. KIMAS'03: Modeling, Exploration, and Engineering

Conference Sponsor: IEEE Boston Sect.; IEEE Robotics & Automation Soc.; IEEE Neural Network Soc.; IEEE Syst. Man & Cybernetics Soc.; INNS; U.S. Air Force; U.S. Army; U.S. Navy; DARPA

Conference Date: 30 Sept.-4 Oct. 2003 Conference Location: Cambridge, MA, USA

Language: English

Subfile: C

Copyright 2004, IEE

Title: Integration of language and cognition at pre-conceptual level

Abstract: We discuss mathematical models of the mechanisms that the mind can use for combining language and **cognition**. I address the problem of concurrent language acquisition and conceptual learning. How a child can learn so **fast**? In concurrent learning of language and **cognitive** structures, language helps learning about objects in surrounding world and vice versa, which might explain why we can learn to recognize objects and words, but cannot remember a yellow page telephone book. The proposed theory addresses **cognitive** mechanisms of concepts, emotions, and goals and relates them to thought processes in which an event (in the outside world, or inside the mind) is understood as a concept. Learning language at the same time helps in this processes. The described framework can use various language models described in **cognitive** and computational linguistic literature, while avoiding combinatorial computational complexity that has been the nemesis of artificial intelligence and computational linguistics. The combinatorial complexity is avoided by using a new type of logic, dynamic logic, that unifies fuzzy logic and formal logic. The **postulated** mechanisms of integration of language and **cognition** at a pre-conceptual level, where conceptual and emotional contents are not differentiated might be interesting for theoretical linguistics and for practical development of understanding...

Descriptors: **cognition** ;

Identifiers: **cognition** ;

19/3,K/2 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0014828431 BIOSIS NO.: 200400196064

Stimulus specific type II theta rhythm elicited in fear conditioning

paradigm.

AUTHOR: Hyman J M (Reprint); Rossi C A (Reprint); Wyble B P (Reprint);
Hasselmo M E (Reprint)
AUTHOR ADDRESS: Dept. Psychol, Boston Univ, Boston, MA, USA**USA
JOURNAL: Society for Neuroscience Abstract Viewer and Itinerary Planner
2003 pAbstract No. 199.15 2003 2003
MEDIUM: e-file
CONFERENCE/MEETING: 33rd Annual Meeting of the Society of Neuroscience New
Orleans, LA, USA November 08-12, 2003; 20031108
SPONSOR: Society of Neuroscience
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: theta rhythm occurs spontaneously in awake behaving rats during periods of heightened arousal and non-appetitive motor activity (running, rearing, sniffing). Kramis et al. (1975) **postulated** that theta could be further classified into two categories: type I, which occurs during deliberate movements (running), and type II, which can occur in the...

...to further elucidate the role of type II theta in learning and memory and to establish a paradigm for the examination of theta activity and **cognitive** function. In this study, animals were conditioned to associate one of two auditory stimuli (CS+) with inescapable foot shock. Regional field activity within area CA1...

...the hippocampus was recorded during subsequent exposure to the stimuli in a session in which no shock was administered. Theta activity was analyzed using a **fast** Fourier transform (FFT) of theta power during the first two seconds following onset of all CS+ presentations and CS-presentations. Theta power in the FFT...

19/3,K/3 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0014359266 BIOSIS NO.: 200300317985

Wanderers: Features, findings, issues.

AUTHOR: Colombo M (Reprint); Vitali S; Cairati M; Perelli-Cippo R; Bessi O; Gioia P; Guaita A
AUTHOR ADDRESS: Geriatric Institute "Camillo Golgi", Piazza Golgi, 11, I-20081, Abbiategrasso, MI, Italy**Italy
JOURNAL: Archives of Gerontology and Geriatrics Supplement 7 p99-106 2001 2001
MEDIUM: print
ISSN: 0924-7947 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: our Special Care Unit. The sample had a mean age 78.6+-9.4 (+-SD) years, and school years of 4.5+-1.5. Clinical **dementia** rating (CDR) gtoreq3 was in 56%; **global deterioration scale (GDS)** gtoreq5 was in 57%; mini mental state examination (MMSE): 7.6+-7.6; Barthel index total score: 57.7+-31.9; Hachinski ischemic score (HIS...

...was higher in wanderers (4.7+-5.0) than in non-wanderers (3.0+-4.4). NPI agitated behavior total score positively correlated with Bedford

Alzheimer nursing severity scale (BANSS), so that most functionally deteriorated persons showed more aberrant motor behavior. Wandering looks associated with an anamnesis positive for **dementia** in patients' fathers. Cluster analysis showed a correlation of wandering with the agitated behavior. Yet, wandering was in a cluster by itself. Wanderers fall thrice...

...by the cumulative illness rating scale (CIRS). The use of neurotropic drugs strongly correlated with behavioral disturbances, but not with wandering. In conclusion, most links **postulated** by theoretical perspectives were confirmed.

DESCRIPTORS:

DISEASES: **dementia** --

MESH TERMS: **Dementia** (MeSH)

19/3,K/4 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0013667105 BIOSIS NO.: 200200260616

Choline acetyltransferase activity and striatal dopamine receptors in Parkinson's disease in relation to cognitive impairment

AUTHOR: Mattila Petri M; Roytta Matias; Lonnberg Pirkko; Marjamaki Paivi; Helenius Hans; Rinne Juha O (Reprint)

AUTHOR ADDRESS: Department of Neurology, University of Turku, 20520, Turku, Finland**Finland

JOURNAL: Acta Neuropathologica 102 (2): p160-166 August, 2001 2001

MEDIUM: print

ISSN: 0001-6322

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

Choline acetyltransferase activity and striatal dopamine receptors in Parkinson's disease in relation to cognitive impairment

...ABSTRACT: 36 age-matched controls was examined for choline acetyltransferase (ChAT) activity, and for densities of D1 and D2 dopamine receptors. Brain samples were examined for **Alzheimer** ' disease (AD) type changes and for Lewy bodies (LBs), and for apolipoprotein E genotype. Patients were evaluated for the stage of **cognitive** impairment using **Reisberg** 's **global deterioration scale** . ChAT activity in PD was reduced in all brain areas examined, being 51% of the control mean in the hippocampus ($P<0.001$), 57% in...

...05). The reduction in ChAT activity in the prefrontal cortex had a significant negative correlation ($r=-0.38$, $P=0.012$) with the extent of **cognitive** impairment. When the CERAD class 'C' was excluded, **cognitive** impairment correlated significantly with both prefrontal ChAT activity ($r=-0.52$, $P=0.0051$) and the density of D1 dopamine receptors in the caudate nucleus...

...controls. An increased D2 receptor number was found in the caudate nucleus and putamen in PD patients treated with neuroleptics. The present study showed that **cognitive** decline in PD is associated with reduced ChAT activity in the prefrontal cortex and the D1 dopamine receptor number in the caudate nucleus, even in...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ...Parkinson's disease brain activity,

cognitive impairment relationship...

...Parkinson's disease brain expression, **cognitive** impairment
relationship

19/3,K/5 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013251088 BIOSIS NO.: 200100422927
Diagnostic value of quantitative EEG in Alzheimer 's disease
AUTHOR: Bennys K (Reprint); Rondouin G; Vergnes C; Touchon J
AUTHOR ADDRESS: Unite de neurologie comportementale et degenerative,
service de neurologie B, hopital Gui de Chauliac, Montpellier, France**
France
JOURNAL: Neurophysiologie Clinique 31 (3): p153-160 June, 2001 2001
MEDIUM: print
ISSN: 0987-7053
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Diagnostic value of quantitative EEG in Alzheimer 's disease

ABSTRACT: The aim of this study was to determine the performance of several spectral indices of the EEG (ratios between **fast** and slow EEG activities) as descriptors of the EEG changes occurring at the onset and during the evolution of **Alzheimer 's disease** (AD). These indices were calculated from quantitative analysis of EEGs recorded in AD patients and from a matched non-demented group of control...

...is to be independent of the absolute value of power spectral densities, which may vary from subject to subject, another being to take into account **fast** EEG activities. Conventional statistic tests and Receiver Operating Curves (ROC) analysis were performed upon these data to determine the accuracy of the power ratios to discriminate a) between controls and patients (i.e., to detect **dementia**) and b) between subgroups of patients defined according to the **Global Deterioration Scale** of **Reisberg** (**GDS**). The defined ratios provided a good classification of AD patients for all cerebral regions except the frontal areas, because of eye movement artefacts; the results confirm the increase in slow activities and the concomitant decrease in **fast** activities early in AD patients. Moreover, our results demonstrate that these indices are adapted tools to perform a good discrimination between demented and non-demented patients in routine clinical practice. We therefore propose the use of these EEG power ratios to discriminate between different stages of **Alzheimer 's disease**, and to perform long-term monitoring of AD patients.

DESCRIPTORS:

DISEASES: **Alzheimer 's disease**...

MESH TERMS: **Alzheimer** Disease (MeSH)

19/3,K/6 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013112643 BIOSIS NO.: 200100284482
Paradoxical sleep is characterized by uncoupled Gamma activity between frontal and perceptual cortical regions

AUTHOR: Perez-Garci Enrique; del-Rio-Portilla Yolanda; Guevara Miguel Angel
; Arce Consuelo; Corsi-Cabrera Maria (Reprint)
AUTHOR ADDRESS: Facultad de Psicologia, Posgrado, Copilco-Universidad,
Universidad Nacional Autonoma de Mexico, Av. Universidad 3004, Mexico,
DF, 04510, Mexico**Mexico
JOURNAL: Sleep (Rochester) 24 (1): p118-126 February 1, 2001 2001
MEDIUM: print
ISSN: 0161-8105
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Study Objectives: Coherent activity of **fast** activity has been **postulated** to be a common language of the brain involved in the processing of information and in integration of spatially separated but temporally correlated stimuli into whole events. Any disruption affecting temporality would result in distortion of **cognitive** activity. Dreaming during paradoxical sleep (PS) shows **cognitive** alterations that mimic frontal lobe dysfunction. Decreased temporal coupling of EEG between frontal and perceptual regions was hypothesized. The main objective was to explore temporal relationships of **fast** activity among these regions. Design: N/A Setting: N/A Participants: 8 young adults. Interventions: N/A Measurements and Results: Interhemispheric (INTERr) and intrahemispheric (INTRAr...)

...and PS during the second night spent at the laboratory. INTERr showed a significant overall increase during sleep in comparison to wakefulness, whereas INTRAr of **fast** activity (27-48 Hz) between frontal-perceptual regions (F-P, F-O, F-T, Fp-P, Fp-T) decreased exclusively during PS while INTRAr among...

...P-T, O-T) maintained wakefulness values. Conclusions: Present results demonstrate state- and frequency-dependent shifts on temporal coupling. The hypothesized decrease in correlation of **fast** activity between frontal and perceptual regions during PS was confirmed. This decrease of temporal coupling might underlie the loss of voluntary direction of thinking and congruence with social and temporal context and the lack of judgment and passive acceptance of bizarreness during PS dreaming. The wakefulness levels in correlation of **fast** activity among perceptual regions might explain perceptual acuity during PS dreaming.

19/3,K/7 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012915884 BIOSIS NO.: 200100087723
Primary cortical neurons deficient in presenilin-1 display autophagic accumulations containing a subset of synaptic proteins
AUTHOR: Wilson C A (Reprint); Murphy D D; Lee V M
AUTHOR ADDRESS: University of Pennsylvania, Philadelphia, PA, USA**USA
JOURNAL: Society for Neuroscience Abstracts 26 (1-2): pAbstract No.-277.9
2000 2000
MEDIUM: print
CONFERENCE/MEETING: 30th Annual Meeting of the Society of Neuroscience New Orleans, LA, USA November 04-09, 2000; 20001104
SPONSOR: Society for Neuroscience
ISSN: 0190-5295
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Presenilin-1 is a multi-transmembrane protein localized to the ER and Golgi that plays a role in familial forms of **Alzheimer** 's disease. Absence of PS1 results in multiple phenotypes due to specific defects in the cleavage of membrane-associated proteins such as the amyloid precursor...

...characteristics of autophagosomes. Furthermore, we have discovered that members of one family of presynaptic proteins are specifically localized to these autophagosomes. Although PS1 has been **postulated** to play a role in protein trafficking, the accumulation of these proteins is not correlated with gross alterations in axonal transport, as other synaptic and axonal proteins trafficked via either **fast** or slow transport are localized to their normal destinations within the cell. The presence of these proteins within autophagosomes reflects either a specific block in

DESCRIPTORS:

DISEASES: **Alzheimer** 's disease...

MESH TERMS: **Alzheimer** Disease (MeSH)

19/3,K/8 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0012573033 BIOSIS NO.: 200000291346

A prospective PMS study to validate the sensitivity for change of the D-Scale in advanced stages of dementia using the NMDA-antagonist memantine

AUTHOR: Ruether E (Reprint); Glaser A; Bleich S; Degner D; Wiltfang J

AUTHOR ADDRESS: Psychiatrische Klinik, Georg-August-Universitaet, von-Siebold-Strasse 5, D-37075, Goettingen, Germany**Germany

JOURNAL: Pharmacopsychiatry 33 (3): p103-108 May, 2000 2000

MEDIUM: print

ISSN: 0176-3679

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

A prospective PMS study to validate the sensitivity for change of the D-Scale in advanced stages of0 dementia using the NMDA-antagonist memantine

ABSTRACT: The present postmarketing surveillance (PMS) study is the first large scale systematic and prospective clinical trial of pharmacotherapeutic intervention in advanced stages of **dementia** . Within a validation program this study aimed at demonstrating the sensitivity of the D-Scale of change (DS-C) for measuring ADL-function. Efficacy of treatment with the NMDA-antagonist memantine was investigated in 531 patients with advanced **dementia** employing a parallel group design that stratified patient cohorts by severity according to **GDS** stages (**Reisberg** , 1992). Efficacy was determined on two independent levels: by the assessment of the physicians' Clinical Global Impression of Change (CGI-C) at the end of...

...caregivers using the D-Scale-of-Change. With the D-Scale-of-Change the caregivers can assess a change in broad functional items, i.e. **cognitive** and motor functions and also elementary functions of daily life. The effect size of this improvement increased constantly during the observation period. Even in patients of **GDS** stage 7 an improvement

could be measured. These results were also seen by the physicians, who recorded an overall clinical improvement in 75.5% of...

...time course of symptomatic benefit by effects of memantine that had been repeatedly demonstrated in randomised, double-blind, placebo-controlled studies in mild to moderate **dementia**. Together with the evaluation of the scale-properties of the D-Scale for assessment of severity the D-Scale and the D-Scale-of-Change...

DESCRIPTORS:

DISEASES: **dementia** --

MESH TERMS: **Dementia** (MeSH...

19/3,K/9 (Item 8 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0012058318 BIOSIS NO.: 199900317978

Words in the brain's language

AUTHOR: Pulvermueller Friedemann (Reprint)

AUTHOR ADDRESS: Department of Psychology, University of Konstanz, 78434, Konstanz, Germany**Germany

JOURNAL: Behavioral and Brain Sciences 22 (2): p253-336 April, 1999 1999

MEDIUM: print

ISSN: 0140-525X

DOCUMENT TYPE: Article; Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: of the meaning of the words they represent, and physiological signs of cell assembly ignition should be followed by possible indicators of reverberation. The following **postulates** are discussed in detail: (1) assemblies representing phonological word forms are strongly lateralized and distributed over perisylvian cortices; (2) assemblies representing highly abstract words such...

...on stimulus-triggered event-related potentials (ERPs), positron emission tomography (PET), and functional magnetic resonance imaging (fMRI), and (b) studies of the temporal dynamics of **fast** activity changes in the brain, as revealed by high-frequency responses recorded in the electroencephalogram (EEG) and magnetoencephalogram (MEG). These data provide evidence for processing...

DESCRIPTORS:

MISCELLANEOUS TERMS: ... **cognition** ;

19/3,K/10 (Item 9 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0011528189 BIOSIS NO.: 199800322436

Cortical lewy bodies and Alzheimer -type changes in patients with Parkinson's disease

AUTHOR: Mattila P M; Roytta M; Torikka H; Dickson D W; Rinne J O (Reprint)

AUTHOR ADDRESS: Dep. Neurol., Univ. Turku, FIN-20520 Turku, Finland** Finland

JOURNAL: Acta Neuropathologica 95 (6): p576-582 June, 1998 1998

MEDIUM: print

ISSN: 0001-6322

DOCUMENT TYPE: Article

RECORD TYPE: Abstract
LANGUAGE: English

Cortical lewy bodies and Alzheimer -type changes in patients with Parkinson's disease

ABSTRACT: We investigated the role of cortical Lewy bodies (LB) and **Alzheimer** -type changes in **cognitive** impairment in patients with idiopathic Parkinson's disease (PD). We evaluated 44 cases for the extent of neuropathological lesions with a CERAD neuropathological assessment battery and the stage of **dementia** using **Reisberg** 's **global deterioration scale** (**GDS**). Substantia nigra, amygdala, hippocampus and cerebral cortex were examined for LB and **Alzheimer** -type changes. For detection of LB, the cortical areas were stained with polyclonal antibodies against ubiquitin and tau. We found at least one cortical LB in 93% of cases. Furthermore, 43% of the cases had histological findings of definite **Alzheimer** 's disease (AD). The association between **cognitive** impairment and the number of cortical LB and **Alzheimer** -type changes in the amygdala, hippocampus and six selected gyri from cerebral cortex were analyzed using stepwise linear regression. In this analysis the total number...

...significant. When the cases with neuropathological changes consistent with a diagnosis of AD were excluded, the correlation between the total number of cortical LB and **cognitive** impairment was more obvious. A stepwise linear regression analysis in these cases found the total number of cortical LB to be the statistically significant predictor of **cognitive** impairment. This study revealed that LB densities in the cortex, especially in the temporal neocortex, correlated significantly with the **cognitive** impairment in PD independent of or in addition to **Alzheimer** -type pathology.

DESCRIPTORS:

DISEASES: **dementia** --...

... **Alzheimer** 's disease

MESH TERMS: **Dementia** (MeSH...

... **Alzheimer** Disease (MeSH

MISCELLANEOUS TERMS: **cognitive** impairment

19/3,K/11 (Item 10 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0011375371 BIOSIS NO.: 199800169618

Novel large apolipoprotein E-containing lipoproteins of density 1.006-1.060 g/ml in human cerebrospinal fluid

AUTHOR: Guyton John R (Reprint); Miller Sara E; Martin Margaret E; Khan Wasiuddin A; Roses Allen D; Strittmatter Warren J

AUTHOR ADDRESS: Div. Endocrinol. Metabolism Nutrition, Dep. Med., Box 3510, Duke Univ. Med. Cent., Durham, NC 27710, USA**USA

JOURNAL: Journal of Neurochemistry 70 (3): p1235-1240 March, 1998 1998

MEDIUM: print

ISSN: 0022-3042

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Although the critical role of apolipoprotein E (apoE) allelic variation in **Alzheimer** 's disease and in the outcome of CNS injury is

now recognized, the functions of apoE in the CNS remain obscure, particularly with regard to...

...CSF HDL, fractions. Large lipoproteins 18.3 +/- 6.6 nm in diameter (mean +/- SD) in the HDL1 density range were demonstrated by electron microscopy. Following **fast** protein liquid chromatography of CSF at physiologic ionic strength, apoE was demonstrated in particles of average size greater than particles containing apoA-1. The largest...

...containing lipoproteins was confirmed without ultracentrifugation. Interconversion between the more abundant smaller apoE-HDL subfractions 2 and 3 and the novel larger apoE-HDL, is **postulated** to mediate a role in cholesterol redistribution in brain.

19/3,K/12 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0011344424 BIOSIS NO.: 199800138671

The role of magnetic resonance techniques in understanding and managing multiple sclerosis

AUTHOR: Miller D H (Reprint); Grossman R I; Reingold S C; McFarland H F
AUTHOR ADDRESS: Dep. Clinical Neurol., Inst. Neurol., Queen Square, London WC1 3BG, UK**UK

JOURNAL: Brain 121 (1): p3-24 Jan., 1998 1998

MEDIUM: print

ISSN: 0006-8950

DOCUMENT TYPE: Article; Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: multiple sclerosis. The principles underlying signal-to-noise and contrast-to-noise ratio are discussed, along with the techniques and clinical results for conventional and **fast** spin echo T2-weighted imaging, fluid-attenuated inversion recovery, detection of blood-brain barrier break down and hypointense lesions on T1-weighted images, magnetization transfer...

...sclerosis. T2-weighted brain imaging remains the standard diagnostic tool, but in some instances it is usefully complemented with gadolinium enhancement and spinal imaging. The **caveat** that the diagnosis of multiple sclerosis remains primarily a clinical one cannot be over-emphasized. Serial MRI studies have added much to our understanding of...

...the discrepancy between lesion site and function in attempting to correlate locomotor disability with brain MRI-findings. However, the correlations between brain lesion load and **cognitive** dysfunction in multiple sclerosis, whilst more evident, are still modest. A more important limitation is the low pathological specificity of abnormalities seen on T2-weighted...

19/3,K/13 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0010504731 BIOSIS NO.: 199699138791

Anticholinergic therapy and dementia in patients with Parkinson's disease

AUTHOR: Pondal Margarita (Reprint); Del Ser Teodoro; Bermejo Felix
AUTHOR ADDRESS: Seccion de Neurol., Hosp. Severo Ochoa, Avda. Orellana s/n,
Leganes, 28911 Madrid, Spain**Spain
JOURNAL: Journal of Neurology 243 (7): p543-546 1996 1996
ISSN: 0340-5354
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Anticholinergic therapy and dementia in patients with Parkinson's disease

ABSTRACT: In a cross-sectional study performed in 1980 on 70 consecutive Parkinson's disease (PD) outpatients, we investigated the factors associated with **dementia**, especially anticholinergic drugs. All cases fulfilled three major clinical criteria of PD, and underwent extensive clinical and laboratory examinations, including brain CT and neuropsychological assessment. Cases with mental deterioration at the onset of the illness or confusional status were excluded. In 15 patients the diagnosis of **dementia** was made according to DSM-III criteria; 15 other non-demented patients scoring 4 on the **Reisberg's Global Deterioration Scale** were labelled as "mentally deteriorated", and the remaining 40 cases were considered **cognitively** normal. In a logistic multiple regression analysis only age, female sex and time of anticholinergic intake were significantly associated with **dementia**. We conclude that anticholinergic drugs must be avoided in PD patients with some **cognitive** decline.

DESCRIPTORS:

MISCELLANEOUS TERMS: ... **COGNITIVE** DECLINE

19/3,K/14 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0010038076 BIOSIS NO.: 199598505909

Temporal order of cognitive and functional loss in a nursing home population

AUTHOR: Cohen-Mansfield Jiska; Werner Perla (Reprint); Reisberg Barry
AUTHOR ADDRESS: Res. Inst., Hebrew Home Greater Wash., 6121 Montrose Rd.,
Rockville, MD 20852, USA**USA
JOURNAL: Journal of the American Geriatrics Society 43 (9): p974-978 1995
1995
ISSN: 0002-8614
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Temporal order of cognitive and functional loss in a nursing home population

ABSTRACT: OBJECTIVE: The order in which **cognition** and the ability to perform activities of daily living (ADLs) are lost in an institutionalized aged population was examined. Understanding the order of loss of...
...408 nursing home residents. Residents' abilities to perform ADLs were rated by nursing staff using Linn and Linn's Rapid Disability Rating Scale (RDRS-2); **cognitive** functioning was rated by social workers and nursing staff using a modified version of **Reisberg et al.'s Brief Cognitive Rating Scale (BCRS)**, with 4 axes: orientation, concentration, recent memory, and past memory). RESULTS: The results

regarding ADLs confirm previous findings of a natural order of loss of...

...memory, and orientation revealed that these seem to be lost concurrently when the cutpoint was 3 (i.e., relatively normal functioning vs. moderate and severe **dementia**). When the cutpoint was 6 (i.e., severe **dementia** vs. higher levels of functioning), the order that emerged was: recent memory, past memory, concentration, and orientation. CONCLUSIONS: Although there is a significant relationship between loss of ability to perform ADLs and stage of **cognitive** impairment, the loss of any specific ADL is not uniquely related to any one stage of **cognitive** deterioration in this diverse population. This may be explained by the high prevalence of disease in this institutionalized population, as exemplified by the 60% suffering from arthritis and the 17% suffering from neurological disorders other than **dementia**.

DESCRIPTORS:

MISCELLANEOUS TERMS: ... **COGNITIVE** DETERIORATION...
... **DEMENTIA** ;

19/3,K/15 (Item 14 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0009225054 BIOSIS NO.: 199497246339

Neuropathology of 20 French centenarians I clinical data

AUTHOR: Fayet G; Hauw J J (Reprint); Delaere P; He Y; Duyckaerts C; Beck H; Forette F; Gallinari C; Laurent M; Moulias R; Piette F; Sachet A

AUTHOR ADDRESS: Lab. Neuropathol. R Escourolle, Hopital de la Salpetriere, 47 Bd de l'Hopital, 75651 Paris, Cedex 13, France**France

JOURNAL: Revue Neurologique (Paris) 150 (1): p16-21 1994 1994

ISSN: 0035-3787

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: French

...ABSTRACT: the basis of a retrospective evaluation of clinical records, and of an inquiry among the caring staff Their mental status was also evaluated by the **Global Deterioration Scale** of **Reisberg** et al (1985). Five patients had been demented, four had been intellectually normal, and II had suffered from mild disturbances of memory or **cognitive** functions. This series was not representative of the general population of centenarians, but probably of those institutionalized in France. We observed a low proportion of demented patients despite the prevalence expected from epidemiological studies. This is difficult to interpret. The low proportion of **dementia** in this small sample is not due to the short duration of the course of diseases responsible for **dementia**. The differences between the data concerning small groups of inpatients, and those concerning larger populations subjected to epidemiological studies could be explained by the better distinction, in hospitalised patients, between severe **dementia** and the mild forms of **cognitive** impairment frequent in the elderly. The results of our study though they were obtained in a small sample, argue for the prevalence of **dementia** being lower than previously thought in the oldest people.

DESCRIPTORS:

MISCELLANEOUS TERMS: **COGNITIVE** IMPAIRMENT...
... **DEMENTIA** ;

19/3,K/16 (Item 15 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0008382733 BIOSIS NO.: 199294084574

CLONING OF THE GENES FOR EXCITATORY AMINO ACID RECEPTORS

AUTHOR: HENNEBERRY R C (Reprint)

AUTHOR ADDRESS: NEUROSCI PROGRAM, CONTE INST ENVIRON HEALTH, PITTSFIELD,
MASS 01201, USA**USA

JOURNAL: Bioessays 14 (7): p465-471 1992

ISSN: 0265-9247

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: Glutamate is the major excitatory neurotransmitter in the mammalian brain, with receptors on every neuron in the central nervous system; it has major roles in **fast** synaptic transmission and in the establishment of certain forms of memory. More than 20 years ago Olney and his colleagues described the 'Excitotoxic Hypothesis' which **postulates** that, in addition to its normal function in the healthy brain, glutamate can kill neurons by prolonged, receptor-mediated depolarization resulting in irreversible disturbances in...

...a transition from neurotransmitter to neurotoxin. Its toxicity has been implicated in the death of neurons in ischemia, epilepsy, and the neurodegenerative disorders such as **Alzheimer** 's, Huntington's, and Parkinson's diseases. Recent advances in the molecular cloning of the genes for the glutamate family of receptors has revealed a...

19/3,K/17 (Item 16 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0006739910 BIOSIS NO.: 198988055025

SELF-RECOGNITION IN SENILE DEMENTIA

AUTHOR: BIRINGER F (Reprint); ANDERSON J R; STRUBEL D

AUTHOR ADDRESS: CENTRE DE GERIATRIE, HOPITAL DE LA ROBERTSAU, 83 RUE
HIMMERICH, 67015 STRASBOURG, FRANCE**FRANCE

JOURNAL: Experimental Aging Research 14 (4): p177-180 1988

ISSN: 0361-073X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

SELF-RECOGNITION IN SENILE DEMENTIA

ABSTRACT: Eighteen women with senile **dementia** of the **Alzheimer** type were observed in two situations of mirror-image stimulation, which were repeated after a 3-week interval. Six out of six subjects scoring 5 on the **Global Deterioration Scale** of **Reisberg** et al. [11] reacted appropriately to an unfamiliar mark on their forehead when they observed it in the mirror, thus showing clear self-recognition. Fifty percent of the subjects at **GDS** 6 showed such evidence of self-recognition, and no subject at **GDS** 7 did so. In contrast, whereas 50% of **GDS** 5 subjects responded to a directly visible mark on the back of the hand, all **GDS** 6 subjects reacted to this mark. These results suggest that the capacity for self-recognition may start to be compromised by **GDS** stage 6, and that the eventual failure to show self-recognition in severe senile **dementia** cannot be dismissed in terms of a simple lack of motivation.

DESCRIPTORS: HUMAN ALZHEIMER 'S DISEASE

19/3,K/18 (Item 17 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0002091096 BIOSIS NO.: 197763011952

DISULFIRAM INDUCED CONVULSIONS WITHOUT CHALLENGE BY ALCOHOL

AUTHOR: PRICE T R P; SILBERFARB P M

JOURNAL: Journal of Studies on Alcohol 37 (7): p980-982 1976

ISSN: 0096-882X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: Unspecified

...ABSTRACT: within normal limits. Blood alcohol concentration was zero. Her mental status examination showed evidence of an acute delirium. An EEG 2 days after admission showed **fast** spikey background activity suggestive of a drug effect. Four major seizures occurred on the day of admission and 1 the following day. They were preceded...

...bilateral and typical tonic-clonic generalized grand-mal convulsions which ceased spontaneously after 3 min. Disulfiram was discontinued and phenytoin and phenobarbital administered and her **cognitive** functioning gradually improved. EEG taken 6 and 30 days after admission were normal. Ten days after admission the Halstead-Reitan neuropsychological battery showed evidence of...

...uptake of oxygen or to inhibition of dopamine .beta.-hydroxylase. The latter leads to a decrease in the brain norepinephrine:dopamine ratio, which has been **postulated** to lower the seizure threshold.

19/3,K/19 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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0885122 NTIS Accession Number: AD-A096 117/7/XAB

Knowledge Compilation: Mechanisms for the Automatization of Cognitive Skills

(Technical rept)

Neves, D. M. ; Anderson, J. R.

Carnegie-Mellon Univ., Pittsburgh, PA. Dept. of Psychology.

Corp. Source Codes: 005343020; 387876

Report No.: TR-80-4

25 Jul 80 55p

Languages: English

Journal Announcement: GRAI8114

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Knowledge Compilation: Mechanisms for the Automatization of Cognitive Skills

... skill from the point when it is initially being memorized and applied in a slow and halting fashion to the point where it has become **fast** and automatic through practice. We are interested in how students learn to use **postulates** and theorems in geometry tasks. A scenario of how a student

(based on two students we have looked at in detail in geometry and three subjects working on an artificial proof system) learns **postulates** is as follows. The student reads each of several **postulates** in a section of a textbook. After a brief inspection of the **postulates** the student goes on to the problems at the end of the section that require the student to use the **postulates**. In the student's initial attempts with the **postulates** there is much looking back to them in the textbook because they have not yet been committed to memory. These applications are slow and there is muttering that shows low level matching of the **postulates** like 'If A is RO and B is NY then I can assert that'. After some practice the student has committed the **postulates** to memory. After much practice their selection and application is very **fast**.

19/3,K/20 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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12183297 Genuine Article#: 736XC No. References: 36

Title: Relationships between blood pressure and cognitive functions.

Results of a survey in a French population of subjects with Alzheimer's disease (REAL.FR)

Author(s): Hanon O (REPRINT) ; Latour F; Seux ML; Lenoir H; Forette F; Rigaud AS

Corporate Author(s): Grp REAL FR

Corporate Source: Hop Broca,Serv Geriat,54-56,Rue Pascal/F-75013

Paris//France/ (REPRINT); Hop Broca,Serv Geriat,F-75013 Paris//France/

Journal: REVUE DE MEDECINE INTERNE, 2003, V24, 3 (OCT), P292S-300S

ISSN: 0248-8663 Publication date: 20031000

Publisher: EDITIONS SCIENTIFIQUES MEDICALES ELSEVIER, 23 RUE LINOIS, 75724 PARIS, FRANCE

Language: French Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Relationships between blood pressure and cognitive functions.

Results of a survey in a French population of subjects with Alzheimer's disease (REAL.FR)

Abstract: The relationships between arterial hypertension and **cognitive** decline are complex and studies indicate controversial results.

Objectives. - To evaluate, in a cross sectional study, the relationships between **cognitive** functions and blood pressure in a population of subjects with **Alzheimer's** disease.

Methods. - In 520 subjects of a survey in a French population with **Alzheimer's** disease, relationships between the severity of **cognitive** decline and a history of hypertension or blood pressure level have been searched. **Cognitive** functioning was assessed with validated neuropsychological tests evaluating **cognitive** functions and the capacities in the activities of daily living (Mini Mental State Examination (MMSE), **Alzheimer's** Disease Assessment Scale - **Cognitive** part (ADAS-Cog), Instrumental Activities of Daily Living (IADL), Activities of Daily Living (ADL), Clinical **Dementia** Rating (CDR), **Global Deterioration Scale** (**GDS**) of **Reisberg**). In 456 subjects blood pressure was measured during the consultation.

Results. - The results indicate that after adjustment on age, sex, education level, and the other cardiovascular risk factors, subjects with a history of hypertension have a more marked **cognitive** decline than subjects without history of hypertension. Indeed, in subjects with a history of hypertension, the **cognitive** impairment and its consequences on activities of daily living are more important than in

subjects without history of hypertension (ADAS-cog 19,02+/-8,48...

...94+/-3,29 vs 6,19+/-3,26 p=0,03; global CDR 1,18+/-0,62 vs 1,05+/-0,60, p=0,03, **GDS of Reisberg** 4,41+/-0,74 vs 4.27+/-0,75, p=0,05). In contrast, no relation between blood pressure measurements and **cognitive** function is observed, and moreover an inverse correlation between blood pressure and consequences on activities of daily living is found. Conclusions. - This work indicates that relationships between blood pressure and **cognitive** functions are more complex than a simple linear relation. The present results show that a history of arterial hypertension is associated with a more marked **cognitive** decline in subjects with **Alzheimer**'s disease. In contrast, when the **Alzheimer**'s disease is already developed no relation between blood pressure and **cognitive** functions appears and moreover an inverse correlation with the consequences on activities of daily living is found. (C) 2003 Elsevier SAS. All rights reserved.
...Identifiers--ELDERLY PEOPLE; RISK-FACTORS; **DEMENTIA**; HYPERTENSION; IMPAIRMENT; PERFORMANCE; DISORDERS; PROJECT; DECLINE; COHORT

19/3,K/21 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

09063263 Genuine Article#: 362EN No. References: 40

Title: Factorial and discriminant analyses of neuropsychological variables in familial and sporadic late onset Alzheimer disease

Author(s): Velasquez M; ArcosBurgos M; Toro ME; Castano A; Madrigal L; Moreno S; Jaramilllo N; Lopera F

Corporate Source: UNIV ANTIOQUIA, FAC MED, SECC NEUROL CLIN, PROGRAMA NEUROCIENCIAS, GRP BIOGENESIS/MEDELLIN//COLOMBIA/; UNIV ANTIOQUIA, FAC CIENCIAS EXACTAS & NAT, DEPT BIOL, GRP GENET POBLAC & EPIDEMIOL GENET/MEDELLIN//COLOMBIA/

Journal: REVISTA DE NEUROLOGIA, 2000, V31, N6 (SEP 16), P501-506

ISSN: 0210-0010 Publication date: 20000916

Publisher: REVISTA DE NEUROLOGIA, C/O CESAR VIGUERA, EDITOR, APDO 94121, 08080 BARCELONA, SPAIN

Language: Spanish Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Factorial and discriminant analyses of neuropsychological variables in familial and sporadic late onset Alzheimer disease

Abstract: Introduction. Prevalence of late onset **Alzheimer**'s disease (LOAD) both familial and sporadic is increasing with the raising proportion of third-age population. There are evidences either supporting or rejecting the...

...and NINCS-ADRDA. The following neuropsychological protocol was used: CERAD, Wisconsin, Phonological Fluency, Rey's Figure, Raven, A Cancellation Test, WAIS (Arithmetic); also used were: **Global Deterioration Scale**, **Functional Assessment Staging of Reisberg (FAST)**, Barthel and Yesavage. Parametrical and non-parametrical univariate, factorial (principal components) and discriminant analyses were performed. In total, 52 patients were analyzed (average age: 74...

...Identifiers--APOLIPOPROTEIN-E POLYMORPHISM; **DEMENTIA**; PREVALENCE; CHROMOSOME-1; DISORDER; EUROPE; LOCUS; GENE

19/3,K/22 (Item 3 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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08998838 Genuine Article#: 354YC No. References: 31

Title: Clinical value of hypernatremia in elderly patients

Author(s): Gonthier R (REPRINT) ; Hacini F; Beauchet O; Ferron C; Imler D

Corporate Source: CHU ST ETIENNE, HOP CHARITE, SERV GERONTOL CLIN/F-42055 ST
ETIENNE DU ROUVRAY 2//FRANCE/ (REPRINT)

Journal: PRESSE MEDICALE, 2000, V29, N25 (SEP 9), P1391-1396

ISSN: 0755-4982 Publication date: 20000909

Publisher: MASSON EDITEUR, 120 BLVD SAINT-GERMAIN, 75280 PARIS 06, FRANCE

Language: French Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: 9% were suffering from diarrhea or vomiting. Most of the patients had disabling chronic illnesses (62% loss of two or more ADL of Katz), severe **dementia** (84% level = 6 on the **Reisberg global deterioration scale**). In spite of fluid replacement and follow-up treatment, outcome was poor: 62% of the patients died within three months.

CONCLUSION: Besides digestive and renal losses, hypernatremia in elderly patients is increased by fluid supply disorders consecutive to hypodipsia contracted at the same time as disability and **dementia**. Hypodipsia is a sign of poor prognosis. Prevention must be undertaken early, emphasizing the importance of identifying dehydration early among elderly people with chronic disabling...

19/3,K/23 (Item 4 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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07593460 Genuine Article#: 185ZJ No. References: 36

Title: Disorders of everyday actions in subjects suffering from senile dementia of Alzheimer 's type: An analysis of dressing performance

Author(s): Feyereisen P; Gendron M; Seron X

Corporate Source: UNIV LOUVAIN, DEPT EXPT PSYCHOL/LOUVAIN//BELGIUM/; INST
UNIV GERIATRIE MONTREAL, CTR RECH/MONTREAL/PQ/CANADA/

Journal: NEUROPSYCHOLOGICAL REHABILITATION, 1999, V9, N2 (APR), P169-188

ISSN: 0960-2011 Publication date: 19990400

Publisher: PSYCHOLOGY PRESS, 27 CHURCH RD, HOVE BN3 2FA, EAST SUSSEX,
ENGLAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Disorders of everyday actions in subjects suffering from senile dementia of Alzheimer 's type: An analysis of dressing performance

Abstract: Dressing ability was studied in 25 subjects suffering from senile **dementia of Alzheimer 's type** (SDAT). Performance was assessed by means of the Action Coding System of Schwartz et al. (1991, 1995) and a modified version of Optimage (Gendron & Levesque, 1993). Results showed that impairments of dressing ability were common in SDAT. Global measures of performance were found to correlate with severity of **dementia** as measured by the **Reisberg**, Ferris, DeLeon, and Crook (1982) **Global Deterioration Scale** and the Mini Mental State Examination. More detailed analyses showed that errors were more frequent in fastening than in the other components of the sequence...

...action units, whereas in more severely impaired subjects, other kinds of error also occurred, mostly passivity. Methodological implications of these results are drawn for further **cognitive** analysis of everyday actions in SDAT.

19/3,K/24 (Item 5 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

06107781 Genuine Article#: XV507 No. References: 24

Title: Interuncal distance measurement in Alzheimer 's disease

Author(s): deloSantos ZD; ArriadaMendicoa N; RodriguezAgudelo MECY;
CoronaVazquez T; OteroSiliceo E

Corporate Source: HOSP GABRIEL MANCERA, INST MEXICANO SEGURO SOCIAL/MEXICO
CITY/DF/MEXICO/

Journal: REVISTA ECUATORIANA DE NEUROLOGIA, 1997, V6, N1-2, P3-7

ISSN: 1019-8113 Publication date: 19970000

Publisher: SOCIEDAD ECUATORIANA NEUROLOG, REVISTA ECUATORIANA NEUROLOGIA PO
BOX (09-01) 3734, GUAYAQUIL, ECUADOR

Language: Spanish Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Interuncal distance measurement in Alzheimer 's disease

Abstract: In researching patients with **dementia**, it is important to
perform a thorough evaluation of the patient that includes the
clinical, psychometric and radiographic aspects. Nuclear Magnetic
Resonance (NMR) is a...

...the interuncal distance linear measurement of the NMR coronal sectioning
correlates with the clinical and neuropsychological deterioration
exhibited in patients, we evaluated 25 patients with **dementia**
selected from the **Cognitive** Clinic of the National Neurology and
Neurosurgery institute in Mexico City. We compared them with a patient
control group whose NMRS were reported as normal...

...distance measurement was made linearly on 2 coronal sectionings. The
neuropsychological evaluations were collected using the CERAD test
battery while clinical deterioration was measured with **Reisberg 's**
Global Deterioration Scale (GDS). The interuncal distance in
patients with **dementia** was larger than the one found in the control
group ($p < 0.01$). A correlation between the degree of **cognitive**
deterioration shown by the **GDS** and the degree of schooling in
patients was also detected.

...Identifiers--HIPPOCAMPAL-FORMATION; DIAGNOSTIC-CRITERIA; CONSORTIUM;
ESTABLISH; REGISTRY; CERAD; **DEMENTIA**; ATROPHY; EPIDEMIOLOGY;
RELIABILITY

Research Fronts: 95-1515 001 (TEMPORAL-LOBE EPILEPSY; FOCAL CORTICAL
DYSPLASIA; PARTIAL SEIZURES; SUPRATENTORIAL PRIMITIVE NEUROECTODERMAL
TUMORS IN CHILDREN)

95-2861 001 (VASCULAR **DEMENTIA** ; PROBABLE **ALZHEIMERS** -DISEASE;
COGNITIVE IMPAIRMENT)

95-6584 001 (LEWY BODY VARIANT OF **ALZHEIMERS** -DISEASE; **DEMENTIA**
SEVERITY; APOLIPOPROTEIN-E IMMUNOREACTIVITY WITHIN NEUROFIBRILLARY
TANGLES)

19/3,K/25 (Item 6 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05161251 Genuine Article#: VD805 No. References: 38

Title: EFFICACY OF SHORT-TERM TREATMENT WITH INTRAVENOUSLY ADMINISTERED
GINKGO-BILOBA SPECIAL EXTRACT EGB-761 IN ALZHEIMER -TYPE AND VASCULAR
DEMENTIA

Author(s): HAASE J; HALAMA P; HOOR R

Corporate Source: DR WILLMAR SCHWABE GMBH & CO, WILLMAR SCHWABE STR
4/D-76227 KARLSRUHE//GERMANY//; DR WILLMAR SCHWABE GMBH & CO/D-76227
KARLSRUHE//GERMANY//; UNIV KLINIKUM CHARITE, INNERE MED KLIN/D-10117
BERLIN//GERMANY/
Journal: ZEITSCHRIFT FUR GERONTOLOGIE UND GERIATRIE, 1996, V29, N4 (JUL-AUG
) , P302-309
ISSN: 0044-281X
Language: GERMAN Document Type: ARTICLE (Abstract Available)

**Title: EFFICACY OF SHORT-TERM TREATMENT WITH INTRAVENOUSLY ADMINISTERED
GINKGO-BILOBA SPECIAL EXTRACT EGB-761 IN ALZHEIMER -TYPE AND VASCULAR
DEMENTIA**

Abstract: In a placebo-controlled, randomized, double-blind clinical trial,
40 patients with a mean age of 68 (+/- 12.5) years suffering from
moderate **dementia** (**Alzheimer** , vascular, or mixed type) according to
DSM-III-R criteria were included. Severity of the disease had to
correspond to stages 4 or 5 of **Reisberg** 's **Global Deterioration
Scale** . Infusions of either Egb 761 or placebo were administered 4 days
per week for 4 weeks. Primary outcome measure was the activities of
daily living...

...could be shown on 3 planes of assessment: the behavioral, the
psychopathologic and the psychometric plane. it could be confirmed
that, in patients with moderate **dementia** , short-term intravenous
infusion therapy with Egb 761 results in an improvement of
psychopathology and **cognitive** performance, which is reflected in an
increased ability to cope with the demands of daily living.

...Identifiers--PRIMARY DEGENERATIVE **DEMENTIA** ; DOUBLE-BLIND; PLACEBO;
DISEASE; PREVALENCE; EDUCATION

Research Fronts: 94-1053 004 (TACRINE IN **ALZHEIMERS** -DISEASE; **COGNITIVE**
CHANGE; BASAL FOREBRAIN)

94-0142 001 (BRAIN PROTECTION; EEG FEATURES IN JUVENILE MIGRAINE;
TOPOGRAPHIC MAPS OF SHORT-LATENCY SOMATOSENSORY-EVOKED POTENTIALS)

94-5289 001 (VASCULAR **DEMENTIA** ; **COGNITIVE** IMPAIRMENT IN OLDER
INDIVIDUALS; URBAN ELDERLY POPULATION; RISK-FACTORS FOR **ALZHEIMERS**
-DISEASE)

19/3,K/26 (Item 7 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

03371563 Genuine Article#: ND334 No. References: 961
Title: A BIBLIOGRAPHY OF HEURISTIC-SEARCH RESEARCH THROUGH 1992
Author(s): STEWART BS; LIAW CF; WHITE CC
Corporate Source: US W TECHNOL/DENVER//CO/80202; UNIV MICHIGAN,DEPT IND &
OPERAT ENGN/ANN ARBOR//MI/48109
Journal: IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS, 1994, V24, N2 (FEB), P268-293
ISSN: 0018-9472
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Research Fronts: COMPUTER-COMMUNICATION NETWORKS; SERVICE INDUSTRY;
APPROXIMATE MODEL)
92-0635 003 (CONSTRAINT SATISFACTION USING CONSTRAINT LOGIC
PROGRAMMING; ARC CONSISTENCY; NEURAL NETWORKS)
92-0468 002 (PARALLEL COMPLEXITY; **FAST** ALGORITHMS; VERSATILE
COMBINATORIAL TOPOLOGY FOR MULTIPROCESSOR SYSTEMS)
92-0800 002 (NEURAL NETWORKS; GENERALIZATION IN A BINARY PERCEPTRON
MODEL; LEARNING ALGORITHMS)
92-3875 002 (EXPERT SYSTEM; CONSTRAINT SATISFACTION NEURAL NETWORKS;
COGNITIVE MODEL)
92-4623 002 (GENETIC ALGORITHMS; EFFICIENT GLOBAL OPTIMIZATION FOR
CONCEPTUAL RAINFALL-RUNOFF MODELS; NEURAL NETWORK CLASSIFIERS)
92-7818 002 (EXPERT SYSTEMS; DATA DRIVEN SEARCH...

...1105 001 (LOGIC PROGRAMS; QUALITATIVE MODEL-BASED INTELLIGENT CONTROL
OF A DISTILLATION COLUMN; ABDUCTION IN LEARNING DIAGNOSTIC KNOWLEDGE)
92-1335 001 (CONCEPTUAL CHANGE IN SCIENCE; **COGNITIVE** CONSTRUCTION OF
SCIENTIFIC KNOWLEDGE; TECHNOLOGY DYNAMICS; COMPUTATIONAL PERSPECTIVE)
92-2473 001 (STOCHASTIC INVENTORY SYSTEMS; OPTIMAL STATIONARY POLICIES
IN AVERAGE REWARD MARKOV DECISION-PROCESSES; DYNAMIC HECKSCHER...

...EXPERT SYSTEM)
92-3157 001 (OPTIMAL PARALLEL ALGORITHMS; 2-TERMINAL DIRECTED ACYCLIC
GRAPHS; SIMPLE DISTRIBUTED DETECTION NETWORKS)
92-3958 001 (EXPECTED UTILITY; RISKY CHOICE; INDEPENDENCE **AXIOM**)
92-4801 001 (FAULT-TOLERANT MULTIPROCESSOR SYSTEMS; RECONFIGURABLE
2-DIMENSIONAL SYSTOLIC ARRAYS; FFT ARCHITECTURE; DISTRIBUTED DIAGNOSIS
ALGORITHMS; EMBEDDING GRAPHS)
92-5431 001 (SCHEDULING KNOWLEDGE; GENETIC...

...001 (MODEL-BASED PATH CONTROL ALGORITHMS; KNOWLEDGE TRANSFORMED
HEURISTIC EVALUATION FUNCTION; MEMORY IN ITERATIVE DEEPENING SEARCH)
92-7211 001 (KNOWLEDGE ACQUISITION; DESIGN PROBLEM-SOLVING; LEARNING
COGNITIVE PROCEDURAL SEQUENCES)
92-7619 001 (DYNAMIC PLANAR POINT LOCATION; DICHOTOMOUS SEARCH)

19/3,K/27 (Item 8 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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03145328 Genuine Article#: NJ073 No. References: 81
**Title: FUNCTIONAL IMAGING AND LANGUAGE - EVIDENCE FROM POSITRON EMISSION
TOMOGRAPHY**
Author(s): LIOTTI M; GAY CT; FOX PT
Corporate Source: UNIV TEXAS,HLTH SCI CTR,RES IMAGING CTR,7703 FLOYD CURL

DR/SAN ANTONIO//TX/78284; UNIV TEXAS,HLTH SCI CTR,DEPT PEDIAT
NEUROL/SAN ANTONIO//TX/78284

Journal: JOURNAL OF CLINICAL NEUROPHYSIOLOGY, 1994, V11, N2 (MAR), P175-190
ISSN: 0736-0258

Language: ENGLISH Document Type: REVIEW (Abstract Available)

Abstract: Positron emission tomography (PET) provides an unprecedented opportunity to study the organization of **cognitive** functions in the working brain of normal individuals. A number of PET experiments, based on well-established paradigms derived from **cognitive** psychology, have investigated several aspects of language processing. These studies show that word processing is carried out by a distributed network of cortical areas with functional specificity. Results of this research sometimes confirm-sometimes clearly contradict-classic **axioms** of language organization. This article illustrates some of the methodological issues in PET research, then provides an overview of the most relevant studies using PET. Integrated with other functional imaging methodologies and with behavioral data from **cognitive** psychology and lesion studies, PET will certainly continue to represent a precious tool to enhance our knowledge of the functional organization of language.

Research Fronts: 92-2388 007 (POSITRON EMISSION TOMOGRAPHY; 3-DIMENSIONAL FUNCTIONAL BRAIN IMAGES; REGIONAL CEREBRAL BLOOD-FLOW)

92-6474 002 (NEURAL NETWORKS; **FAST** LEARNING ALGORITHMS; IMPACT OF CONNECTIONIST SYSTEMS)

92-0777 001 (VIABLE MYOCARDIUM; POSITRON EMISSION TOMOGRAPHY; CORONARY-ARTERY DISEASE; REGIONAL LEFT-VENTRICULAR WALL THICKENING; EXERCISE TL-201...

19/3,K/28 (Item 9 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

03007688 Genuine Article#: MV486 No. References: 112

Title: REPRESENTATIONS AND MODELS IN PSYCHOLOGY

Author(s): SUPPES P; PAVEL M; FALMAGNE JC

Corporate Source: STANFORD UNIV,VENTURA HALL/STANFORD//CA/94305; NYU,DEPT PSYCHOL/NEW YORK//NY/10003; UNIV CALIF IRVINE,SCH SOCIAL SCI/IRVINE//CA/92717

Journal: ANNUAL REVIEW OF PSYCHOLOGY, 1994, V45, P517-544

ISSN: 0066-4308

Language: ENGLISH Document Type: REVIEW

...Research Fronts: 1245 004 (LEXICAL SEMANTICS; GRAMMATICAL PRINCIPLES; NP LICENSING; OBJECT POSITIONS; NEGATIVE POLARITY; SYNTAX OF POSTVERBAL FOCUS CONSTRUCTIONS)

92-3958 004 (EXPECTED UTILITY; RISKY CHOICE; INDEPENDENCE **AXIOM**)

92-5344 003 (VISUAL MENTAL IMAGES; **COGNITIVE** TASKS; SPATIAL REPRESENTATION; OBJECT RECOGNITION)

92-1107 002 (MULTIDIMENSIONAL ITEM RESPONSE MODEL; COLOR-VISION SYSTEM; PREDICTING JUDGMENT TIME)

92-1557 002 (WORKING MEMORY; SPATIAL MENTAL MODELS; REASONING STRATEGIES; TEXT COMPREHENSION; INFERENCE DURING READING; NARRATIVE PROCESSING)

92-6474 002 (NEURAL NETWORKS; **FAST** LEARNING ALGORITHMS; IMPACT OF CONNECTIONIST SYSTEMS)

92-7796 002 (TOOL FOR **COGNITIVE** TASK-ANALYSIS; MEDICAL REASONING)

92-0398 001 (AUTOMATIC ADAPTIVE REFINEMENT FINITE-ELEMENT PROCEDURE; ERROR ESTIMATORS; MESH GENERATION; DYNAMIC ALGORITHMS IN COMPUTATIONAL

GEOMETRY)
92-1133 001...

...RISK ASSESSMENT; EXPERT SYSTEMS; BELIEF NETWORKS; ACCURACY OF JUDGMENTAL FORECASTS)

92-3261 001 (TOPICS IN DISCOURSE; LANGUAGE COMPREHENSION; RELEVANCE OF RELEVANCE THEORY)

92-5006 001 (**COGNITIVE** THEORIES OF REPRESENTATION; ELIMINATIVE CONNECTIONISM; FOUNDATIONAL QUESTIONS; CONCEPTUAL SEMANTICS; EVOLUTIONARY EXPLANATION)

92-5772 001 (NATURAL-LANGUAGE SENTENCE GENERATION; FILLING GAPS ONLINE; SYNTACTIC MODULES OF SYSTEMS)

92-6066 001 (KNOWLEDGE IN COMMUNICATION; RELEVANCE OF RELEVANCE THEORY; SOCIAL LANGUAGE USE; IRONY UNDERSTANDING; **COGNITIVE** TEST)

19/3,K/29 (Item 10 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

02807784 Genuine Article#: ME593 No. References: 21

Title: THEORY OF DENDRITIC MORPHOLOGY

Author(s): TAMORI Y

Corporate Source: INST PHYS & CHEM RES, NEURAL NETWORKS LAB, 2-1
HIROSAWA/WAKO/SAITAMA 35101/JAPAN/

Journal: PHYSICAL REVIEW E, 1993, V48, N4 (OCT), P3124-3129

ISSN: 1063-651X

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Abstract: The principle of least effective volume, which is **postulated** in this study, leads to analytical derivation of dendritic branch angles of pyramidal neurons. Global parameters such as combined length and shaft area measured in...

Research Fronts: 91-5515 002 (NEURAL NETWORKS; **FAST** NONLINEAR EXTRACTION OF PLASMA EQUILIBRIUM PARAMETERS; **COGNITIVE** ARCHITECTURES)

91-2855 001 (FRACTAL GROWTH; DIFFUSION-LIMITED AGGREGATION; DENSE MORPHOLOGY IN COPPER ELECTRODEPOSITION)

91-5427 001 (PHASE-SPACE PATH INTEGRAL; QUANTUM DYNAMICS; NONRELATIVISTIC SYSTEMS)

19/3,K/30 (Item 11 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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02126337 Genuine Article#: KD269 No. References: 19

Title: NUCLEUS-RETICULARIS THALAMI PARTICIPATES IN SLEEP SPINDLES, NOT IN BETA-RHYTHMS CONCOMITANT WITH ATTENTION IN CAT

Author(s): CANU MH; ROUGEUL A

Corporate Source: UNIV PARIS 06, INST NEUROSCI, CNRS, 9 QUAI ST
BERNARD/F-75230 PARIS 05//FRANCE/

Journal: COMPTES RENDUS DE L ACADEMIE DES SCIENCES SERIE III-SCIENCES DE LA VIE, 1992, V315, N12 (DEC 3), P513-520

ISSN: 0764-4469

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: more widespread. It is shown here through single unit recording from the thalamic nucleus reticularis (RET), that the latter structure participates in spindles (as already **postulated** by other authors), but not in the beta rhythms which seem to depend on a more

restricted thalamic focus in the posterior thalamic nucleus. These data thus support the idea that RET plays a role in slow-wave sleep but not in the **cognitive** operations involved in focussing attention.
Research Fronts: 90-0846 001 (THALAMIC RELAY NEURONS; CAT LATERAL GENICULATE-NUCLEUS; EMBRYONIC BASAL FOREBRAIN TISSUE RESTORE LOW-VOLTAGE **FAST** ACTIVITY IN RATS)

19/3,K/31 (Item 12 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

01327339 Genuine Article#: GP916 No. References: 45
Title: LOCAL ADAPTATIONS OF 2 NATURALLY-OCCURRING NEURONAL CONDUCTANCES, GK+(A) AND GK+(CA), ALLOW FOR ASSOCIATIVE CONDITIONING AND CONTIGUITY JUDGMENTS IN ARTIFICIAL NEURAL NETWORKS
Author(s): BERNER J; WOODY CD
Corporate Source: UNIV CALIF LOS ANGELES,CTR HLTH SCI,MENTAL RETARDAT RES CTR,RM 58-232,760 WESTWOOD PLAZA/LOS ANGELES//CA/90024; UNIV CALIF LOS ANGELES,MED CTR,DEPT ANAT/LOS ANGELES//CA/90024; UNIV CALIF LOS ANGELES,MED CTR,DEPT PSYCHIAT/LOS ANGELES//CA/90024
Journal: BIOLOGICAL CYBERNETICS, 1991, V66, N1, P79-86
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Abstract: Features of two potassium conductances implicated in the acquisition of conditioned reflexes, the slow calcium dependent conductance (gK + (Ca)) and the **fast** transient conductance (gK + (A)), were incorporated into a 6 x 6 element artificial neural network. Adaptive algorithms derived from observations of cortical neurons during associative...

...did not markedly interfere with acquisition of the other. This network may accordingly serve as an example of a self-organizing system which minimizes the **postulated** inherent cross talk between functionally dissimilar representations (Minsky and Papert 1988).

Research Fronts: 89-0174 002 (NEURAL NETWORKS; ASSOCIATIVE MEMORY; NEURONAL MODELS OF **COGNITIVE** FUNCTIONS)
89-0226 002 (POTASSIUM CURRENTS; IDENTIFIED MOLLUSCAN NEURONS; RAT RECORDED INVITRO)

19/3,K/32 (Item 13 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

00802630 Genuine Article#: EX406 No. References: 66
Title: NEUROTOXIC LESION OF THE MESENCEPHALIC RETICULAR-FORMATION AND OR THE POSTERIOR HYPOTHALAMUS DOES NOT ALTER WAKING IN THE CAT
Author(s): DENOYER M; SALLANON M; BUDA C; KITAHAMA K; JOUVET M
Corporate Source: UNIV CLAUDE BERNARD,DEPT MED EXPTL,CNRS,URA 1195,INSERM,U52,8 AVE ROCKEFELLER/F-69373 LYONS//FRANCE/
Journal: BRAIN RESEARCH, 1991, V539, N2, P287-303
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: comatose state for 2-3 days. This state was accompanied by a transitory hypothermia and the suppression of a spontaneous or evoked cortical low voltage **fast** activity. However, from the 2nd postoperative week, both behavioral and EEG waking re-occurred. By contrast, the two successive operations (MRF followed by PH) did...

...findings indicate that neither the MRF nor the PH play a necessary role for initiating or maintaining behavioral or EEG arousal, and lead us to **postulate** multiple systems for waking.

Research Fronts: 89-1306 003 (CHOLINERGIC DRUGS; EARLY STAGES OF LATE ONSET **ALZHEIMERS** -DISEASE; BASAL FOREBRAIN NEURONS; MEMORY IMPAIRMENT IN RATS)

89-2382 001 (CAT LOCUS COERULEUS; RAT SOLITARY TRACT NUCLEUS; TASTE RESPONSES; TOOTH-PULP PRIMARY AFFERENT NEURONS...

19/3,K/33 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

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12596547 EMBASE No: 2004196459

Rates of progression in mild cognitive impairment

ROKOWANIE W 1(stroke)AGODNYCH ZABURZENIACH POZNAWCZYCH

Bidzan L.; Bidzan M.

L. Bidzan, II Klinika Chorob Psychiczych, AM, Gdansk Poland

Psychiatria Polska (PSYCHIATR. POL.) (Poland) 2004, 38/2 (251-262)

CODEN: PSPOB ISSN: 0033-2674

DOCUMENT TYPE: Journal ; Article

LANGUAGE: POLISH SUMMARY LANGUAGE: ENGLISH; BULGARIAN; GERMAN; FRENCH

NUMBER OF REFERENCES: 20

Rates of progression in mild cognitive impairment

...aim of the study which was based on a five year prospective scheme was the evaluation of progressive changes in persons with a diagnosed mild **cognitive** impairment (MCI). Method: A result of 3 in the **Global Deterioration Scale** (**Reisberg** 's criteria), allowed for mild **cognitive** impairment diagnosis. The CGI scale result in the 5SUPth year of observation was the bases to divide the studied population into a group with a...

...done after the first year of the observation. Amongst those persons who had a worsening above 1.68 in the first year of the observation, **Alzheimer** 's disease could be diagnosed definitely more frequently in the further stages of the observation. Conclusions: Evaluation of cognitive function impairment progression seems to be...

MEDICAL DESCRIPTORS:

* **cognitive** defect--diagnosis--di

disease course; disease severity; prospective study; deterioration; symptomatology; **Alzheimer** disease; **cognition** ; mini mental state examination; psychologic test; human; clinical article; article

19/3,K/34 (Item 2 from file: 73)

DIALOG(R)File 73:EMBASE

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12328515 EMBASE No: 2003441065

Not so fast ! (and not so frugal!): Rethinking the recognition heuristic
Oppenheimer D.M.

D.M. Oppenheimer, Department of Psychology, Stanford University, Building 420, Stanford, CA 94305 United States

AUTHOR EMAIL: bigopp@psych.stanford.edu

Cognition (COGNITION) (Netherlands) 2003, 90/1 (B1-B9)

CODEN: CGTNA ISSN: 0010-0277

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 15

Not so fast ! (and not so frugal!): Rethinking the recognition heuristic

The ' **fast** and frugal' approach to reasoning (Gigerenzer, G., & Todd, P. M. (1999). Simple heuristics that make us smart. New York: Oxford University Press) claims that individuals...

...non-compensatory strategies in judgment - the idea that only one cue is taken into account in reasoning. The simplest and most important of these heuristics **postulates** that judgment sometimes relies solely on recognition. However, the studies that have investigated usage of the recognition heuristic have confounded recognition with other cues that...

MEDICAL DESCRIPTORS:

cognition ; behavior; problem solving; psychological aspect; human; human experiment; normal human; controlled study; article; priority journal

19/3,K/35 (Item 3 from file: 73)

DIALOG(R)File 73:EMBASE

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11563255 EMBASE No: 2002131348

Alzheimer therapy with rivastigmin: Efficacy and safety in clinical practice

THERAPIE DER ALZHEIMERKRANKHEIT MIT RIVASTIGMIN SICHERHEIT, VERTRAGLICHKEIT UND WIRKSAMKEIT IN DER PRAXIS

Dal-Bianco P.; Nakajima T.; Nirnberger G.; Ransmayr G.

Dr. P. Dal-Bianco, Universitätsklinik für Neurologie, Wahringer Gürtel 18-20, A-1090 Wien Austria

AUTHOR EMAIL: peter.dal-bianco@univie.sc.at

Neurologie und Rehabilitation (NEUROL. REHABIL.) (Germany) 2002, 8/1 (18-22)

CODEN: NEREF ISSN: 0947-2177

DOCUMENT TYPE: Journal ; Article

LANGUAGE: GERMAN SUMMARY LANGUAGE: ENGLISH; GERMAN

NUMBER OF REFERENCES: 24

Alzheimer therapy with rivastigmin: Efficacy and safety in clinical practice

The degeneration of the cholinergic systems plays a significant role in the decreasing intellectual function in **Alzheimer** 's Disease (AD). Clinical trials with cholinesterase-inhibitors have shown that inhibition of the acetylcholinesterase can improve **cognitive** performance in **Alzheimer** patients. Aim of this open-label, non-controlled study was to assess safety, tolerability and efficacy of rivastigmine - a cholinesterase-inhibitor - in AD patients treated...

...Slight improvements were found in the MMSE, in ADAS-cog subtest (naming of objects and fingers) and Digit Symbol Substitution Test. The global assessment of **dementia** (**GDS Reisberg**) did not change.

MEDICAL DESCRIPTORS:

* **Alzheimer** disease--drug therapy--dt

...effect--si; body weight disorder--side effect--si; vertigo--side effect--si; headache--side effect--si; liver toxicity--side effect--si;

nephrotoxicity--side effect--si; **dementia** --diagnosis--di; **dementia**

--etiology--et; human; male; female; clinical article; clinical trial; aged ; article

19/3,K/36 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
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10660621 EMBASE No: 2000143289
Alzheimer 's disease as a 'trip back in time'
Johnson C.J.; Johnson R.H.
Dr. C.J. Johnson, Institute of Gerontology, University of Louisiana,
Monroe, LA United States
American Journal of Alzheimer's Disease (AM. J. ALZHEIMER'S DIS.) (United States) 2000, 15/2 (87-93)
CODEN: AJADF ISSN: 1082-5207
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 44

Alzheimer 's disease as a 'trip back in time'

Persons with **Alzheimer** 's disease (AD) seem to vary from day to day in their recall of loved ones' names and faces. Such erratic fluctuating and regressive **cognition** is often puzzling and stressful to caregivers. This paper explores the possibility of conceptualizing AD as a 'trip back in time' to help caregivers understand the variation in an AD person's memory, behavior, and physical abilities. Clinical observations suggest that these individuals experience a **cognitive**, emotional, social, physical and fimctional regression with AD. The 'trip back in time' paradigm uses aspects of Piaget's theory of adult development in reverse, **Reisberg** and associates **FAST** and **GDS**, and other **cognitive**, behavioral, and affective research on AD. Using past research to indicate how patients tend to lose many of their functions, the conceptualization goes further to...

MEDICAL DESCRIPTORS:

* **Alzheimer** disease

cognition; caregiver; memory; behavior; physical capacity; emotion; social interaction; regression analysis; human; article

19/3,K/37 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE
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07188372 EMBASE No: 1998080811
Microstructure of movement during a tapping task: Case findings using motion analysis videography
Goodgold-Edwards S.; Kosman L.; Slavin M.
Dr. S. Goodgold-Edwards, Graduate Program in Physical Therapy, Graduate School for Health Studies, Simmons College, 300 The Fenway, Boston, MA 02115 United States
Pediatric Physical Therapy (PEDIATR. PHYS. THER.) (United States) 1998, 10/1 (7-15)
CODEN: PPTHE ISSN: 0898-5669
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 29

...microstructure of movement. Three subject videotapes were chosen based on performance data from a previous study: Subject 1, accurate and slow; Subject 2, inaccurate and **fast**; and Subject 3, accurate and **fast**. The task required the child to tap reciprocally between two targets. Kinematic comparisons among the three subjects revealed differences in how the

children approached the task and how they monitored the action. Discussion includes three clinically relevant **postulates** : 1) Individuals 'privilege' speed or accuracy; 2) Mode of control is related to the performer's **cognitive** strategy and resources; and 3) Use of sensory information affects the level of efficiency in performing a task.

19/3,K/38 (Item 6 from file: 73)

DIALOG(R)File 73:EMBASE

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07000699 EMBASE No: 1997287030

Interuncal distance measurement in Alzheimer 's disease

MEDICION DE LA DISTANCIA INTERUNCAL EN LA DEMENCIA **ALZHEIMER**

De Trujillo De los Santos Z.; Arriada-Mendicoa N.; Rodriguez-Agudelo M. en C.Y.; Corona-Vazquez T.; Otero-Siliceo E.

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Revista Ecuatoriana de Neurologia (REV. ECUAT. NEUROL.) (Ecuador) 1997 , 6/1-2 (3-7)

CODEN: RECNE ISSN: 1019-8113

DOCUMENT TYPE: Journal; Article

LANGUAGE: SPANISH SUMMARY LANGUAGE: SPANISH; ENGLISH

NUMBER OF REFERENCES: 24

Interuncal distance measurement in Alzheimer 's disease

MEDICION DE LA DISTANCIA INTERUNCAL EN LA DEMENCIA **ALZHEIMER**

In researching patients with **dementia** , it is important to perform a thorough evaluation of the patient that includes the clinical, psychometric and radiographic aspects. Nuclear Magnetic Resonance (NMR) is a...
...the interuncal distance linear measurement of the NMR coronal sectioning correlates with the clinical and neuropsychological deterioration exhibited in patients, we evaluated 25 patients with **dementia** selected from the **Cognitive** Clinic of the National Neurology and Neurosurgery Institute in Mexico City. We compared them with a patient control group whose NMRs were reported as normal...

...distance measurement was made linearly on 2 coronal sectionings. The neuropsychological evaluations were collected using the CERAD test battery while clinical deterioration was measured with **Reisberg 's Global Deterioration Scale (GDS)**. The interuncal distance in patients with **dementia** was larger than the one found in the control group ($p < 0.01$). A correlation between the degree of **cognitive** deterioration shown by the **GDS** and the degree of schooling in patients was also detected.

MEDICAL DESCRIPTORS:

* **alzheimer** disease--diagnosis--di; *brain atrophy--diagnosis--di; * **dementia** --diagnosis--di

19/3,K/39 (Item 7 from file: 73)

DIALOG(R)File 73:EMBASE

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06590156 EMBASE No: 1996254814

Efficacy of short-term treatment with intravenously administered Ginkgo biloba special extract EGb 761 in Alzheimer type and vascular dementia

WIRKSAMKEIT KURZDAUERNDER INFUSIONSBEHANDLUNGEN MIT

GINKGO-BILOBA-SPEZIALEXTRAKT EGB 761 BEI DEMENZ VOM VASKULAREN UND

ALZHEIMER -TYP

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Dr. Willmar Schwabe GmbH und Co., Wilmar-Schwabe-Strasse 4, 76227
Karlsruhe Germany
Zeitschrift für Gerontologie und Geriatrie (Z. GERONTOL. GERIATR.) (Germany) 1996, 29/4 (302-309)
CODEN: ZGGEF ISSN: 0044-281X
DOCUMENT TYPE: Journal; Article
LANGUAGE: GERMAN SUMMARY LANGUAGE: GERMAN; ENGLISH

Efficacy of short-term treatment with intravenously administered Ginkgo biloba special extract EGb 761 in Alzheimer type and vascular dementia
WIRKSAMKEIT KURZDAUERNDER INFUSIONSBEHANDLUNGEN MIT
GINKGO-BILOBA-SPEZIALEXTRAKT EGB 761 BEI DEMENZ VOM VASKULAREN UND
ALZHEIMER -TYP

In a placebo-controlled, randomized, double-blind clinical trial, 40 patients with a mean age of 68 (+/- 12.5) years suffering from moderate **dementia** (**Alzheimer** , vascular, or mixed type) according to DSM-III-R criteria were included. Severity of the disease had to correspond to stages 4 or 5 of **Reisberg** 's **Global Deterioration Scale** . Infusions of either EGb 761 or placebo were administered 4 days per week for 4 weeks. Primary outcome measure was the activities of daily living...

...could be shown on 3 planes of assessment: the behavioral, the psychopathologic and the psychometric plane. It could be confirmed that, in patients with moderate **dementia** , short-term intravenous infusion therapy with EGb 761 results in an improvement of psychopathology and **cognitive** performance, which is reflected in an increased ability to cope with the demands of daily living.

MEDICAL DESCRIPTORS:

* **alzheimer** disease--drug therapy--dt; * **dementia** --drug therapy--dt

19/3,K/40 (Item 8 from file: 73)
DIALOG(R)File 73:EMBASE
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03548658 EMBASE No: 1987065594
Molecular forms of acetylcholinesterases in Alzheimer 's disease
Younkin S.G.; Goodridge B.; Katz J.; et al.
Division of Neuropathology, Institute of Pathology, Department of Pharmacology, Case Western Reserve University, Cleveland, OH 44106
United States
Federation Proceedings (FED. PROC.) (United States) 1986, 45/13 (2982-2988)
CODEN: FEPR A
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Molecular forms of acetylcholinesterases in Alzheimer 's disease

In this study, we examined 26 cases of **Alzheimer** 's disease (AD) and 14 age-matched controls. In Brodmann area 21 cerebral cortex of the AD cases, there was no change in soluble Ginf...

...Ainf 8 AChE, and a significant 71% decrease in choline acetyltransferase (ChAT) (EC 2.3.1.6). Our working hypothesis to account for these changes **postulates** 1) that soluble globular forms are unchanged because they are primarily associated with intrinsic cortical neurons that are relatively unaffected by AD, 2) that ChAT...

...incoming axons of cholinergic neurons that are abnormal in AD, and 3) that asymmetric forms of AChE increase because of an acrylamide-type impairment of **fast** axonal transport in diseased incoming cholinergic axons. In the nucleus basalis of Meynert (nbM) of the 26 AD cases, there was a significant 61% decrease...

MEDICAL DESCRIPTORS:

* **alzheimer** disease; *brain cortex; *cholinergic nerve cell

19/3,K/41 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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16439626 PASCAL No.: 04-0081589

Number-word reading as challenging task in dyslexia? An ERP study
Where and when in the developing brain: neurophysiology of cognition in infants and children

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TAYLOR M J, ed

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Centre de Recherche Cerveau et Cognition, CNRS UMR 5549, Universite Paul Sabatier, Faculte de Medecine de Rangueil, 133 Route de Narbonne, Toulouse 31062, France

Journal: International journal of psychophysiology, 2003, 51 (1) 69-83

Language: English

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Where and when in the developing brain: neurophysiology of cognition in infants and children

... Our results show that young adults may develop a particular compensation strategy for reading words of different frequency. We found that: (1) Lexical access is **fast** and accurate in good readers and the early components elicited by words and number-words do not differ. (2) Attentional effort is reflected by enhanced...

French Descriptors: Dyslexie; Potentiel evoque **cognitif** ; Stimulus visuel; Enfant; Traitement information; Resolution probleme; Cortex cerebral; Acces lexique; Semantique; Lecture; Mot; Nombre

Spanish Descriptors: Dislexia; Potencial evocado **cognitivo** ; Estimulo visual; Nino; Procesamiento informacion; Resolucion problema; Corteza cerebral; Acceso lexico; Semantica; Lectura; Palabra; Numero

Broad Descriptors: Human; Communication disorder; Language disorder; Reading disorder; Electrophysiology; **Developmental stage** ; **Cognition** ; Encephalon; Central nervous system; Homme; Trouble communication; Trouble langage; Trouble lecture; Electrophysiologie; Stade developpement ; **Cognition** ; Encephale; Systeme nerveux central; Homme; Trastorno comunicacion; Trastorno lenguaje; Trastorno lectura; Electrofisiologia; Grado desarrollo; Cognicion; Encefalo; Sistema nervioso central

19/3,K/42 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal

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16383473 PASCAL No.: 04-0020738

The Stroop Color-Word Interference Test as an indicator of ADHD in poor

readers

SAVITZ J B; JANSEN P
Department of Psychology, University of the Witwatersrand, Johannesburg,
South Africa
Journal: The Journal of genetic psychology, 2003, 164 (3) 319-333
Language: English

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... ADHD group and the control group on the color-word test, indicating that poor reading skills may produce false negatives on the Stroop test. However, **fast** and slow readers with ADHD did not perform differently from each other on the color-word test. The authors **postulated** the existence of two different causes of reading problems: phonological deficits and attentional deficits.

English Descriptors: Attentional disorder; Hyperactivity; Stroop effect; Interference; Executive function; Reading disorder; **Cognitive** disorder; Phonology; Concomitant disease; School age; Child; Preadolescent
French Descriptors: Trouble attention; Hyperactivite; Effet Stroop; Interference; Fonction executive; Trouble lecture; Trouble **cognition** ; Phonologie; Association morbide; Age scolaire; Enfant; Preadolescent

Spanish Descriptors: Trastorno atencion; Hiperactividad; Efecto Stroop; Interferencia; Funcion ejecutiva; Trastorno lectura; Trastorno **cognitivo** ; Fonologia; Asociacion morbosa; Edad escolar; Nino; Preadolescente

19/3,K/43 (Item 3 from file: 144)
DIALOG(R)File 144:Pascal
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16012980 PASCAL No.: 03-0158840
Loss of temporal lobe beta power in young adults with type I diabetes mellitus
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Department of Surgical Sciences, Section of Clinical Physiology, Karolinska Institutet, Karolinska Hospital, 17176 Stockholm, Sweden
Journal: Neuroreport : (Oxford), 2002, 13 (18) 2469-2473
Language: English

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Cognitive defects have been reported in type I diabetes mellitus with possible correlation to recurrent episodes of hypoglycemia. The purpose of the present study was to...

... free EEG from each subject and EEG was repeated in diabetic patients after 3 and 9 months. The most pronounced finding was a loss of **fast** oscillations (alpha, beta and gamma activity) in both posterior temporal regions, with $p < 0.001$ for beta and $p < 0.05$ or 0.01 for...

... and beta power showed a high test-retest reliability at both 3 and 9 months (0.88-0.92). The focal decrease in temporal lobe **fast** activity suggests that these brain regions are preferentially affected by type I diabetes. This abnormality may be related to the mechanism underlying the **cognitive** dysfunction described in diabetes.

Broad Descriptors: Human; Endocrinopathy; Electrophysiology; **Developmental stage** ; Homme; Endocrinopathie; Electrophysiologie; Stade developpement

; Hombre; Endocrinopatía; Electrofisiología; Grado desarrollo

19/3,K/44 (Item 4 from file: 144)

DIALOG(R)File 144:Pascal

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15888927 PASCAL No.: 03-0026886

The effects of a confectionery snack on attention in young boys

BUSCH Caroline R; TAYLOR Holly A; KANAREK Robin B; HOLCOMB Phillip J
Department of Psychology, Tufts University, Medford, MA 02155, United States

Journal: Physiology & behavior, 2002, 77 (2-3) 333-340

Language: English

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The relationship between consumption of a confectionery snack after an overnight **fast** and **cognitive** function was examined using a variety of **cognitive** tasks, including spatial memory, verbal memory, attention, visual perception and short-term memory, in a sample of 21 boys, ages 9-12 years. Performance on...

Broad Descriptors: Human; **Developmental stage** ; **Cognition** ; Vigilance; Acquisition process; Homme; Stade développement; **Cognition** ; Vigilance; Processus acquisition; Hombre; Grado desarrollo; Cognición; Vigilancia; Proceso adquisición

19/3,K/45 (Item 5 from file: 144)

DIALOG(R)File 144:Pascal

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15337381 PASCAL No.: 02-0024068

The influence of serum vitamin B SUB 1 SUB 2 and folate status on cognitive functioning in very old age

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Journal: Biological psychology, 2001, 56 (3) 247-265

Language: English

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The influence of serum vitamin B SUB 1 SUB 2 and folate status on cognitive functioning in very old age

This study examined the relationship between low levels of serum vitamin B SUB 1 SUB 2 and folic acid (FA) and **cognitive** functioning in very old age. The four subsamples of non-demented persons aged 75--96 years - normal B SUB 1 SUB 2 /normal FA; low...

... B SUB 1 SUB 2 /low FA; and low B SUB 1 SUB 2 /low FA, were matched for age and education. A battery of **cognitive** tests was administered including Clock Tests, Block Design, Trail Making Tests (TMT), Digit Span, and tests of verbal fluency. Subjects with low levels of vitamins...

...those of B SUB 1 SUB 2 . This pattern of results was interpreted to mean that elderly persons with low vitamin levels have difficulty when **fast** and accurate processing of novel information is required, but are quite

efficient in utilizing pre-existing knowledge structures.

Broad Descriptors: **Developmental stage** ; **Cognition** ; Investigation method; B-Vitamins; Stade developpement; **Cognition** ; Methode etude; Vitamine B; Grado desarrollo; Cognicion; Metodo estudio; Vitamina B

19/3,K/46 (Item 6 from file: 144)

DIALOG(R)File 144:Pascal

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14989004 PASCAL No.: 01-0143231

Le role de l'expression emotionnelle dans les interactions sociales : Les emotions

(The role of emotional expression in social interactions : The emotions)

KRAUTH-GRUBER S

Laboratoire de Psychologie Sociale, Universite Paris V, France

Journal: Neuro-psy, 2001, 16 (1) 12-17

Language: French Summary Language: English

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Il existe une tendance generale a attribuer des emotions a autrui a partir de ses expressions faciales. Le **postulat** d'un lien direct, automatique, entre emotion et expression deja present chez Darwin, est formule explicitement dans l'hypothese d'efference de Tomkins, hypothese qui...

... permet d'etudier la qualite de la communication non verbale via l'expression emotionnelle. La methode de codage direct de l'expression faciale par le **FAST** ou FACS semble moins adaptee pour etudier les expressions emotionnelles dans les interactions sociales.

English Descriptors: Review; Emotion emotionality; Non verbal communication ; Social interaction; Facial expression; Face; Social development; Social perception; Social **cognition** ; Human

French Descriptors: Article synthese; Emotion emotivite; Communication non verbale; Interaction sociale; Mimique; Face; Developpement social; Perception sociale; **Cognition** sociale; Homme

19/3,K/47 (Item 7 from file: 144)

DIALOG(R)File 144:Pascal

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14598416 PASCAL No.: 00-0266527

Motor control and state regulation in children with ADHD: a cardiac response study

Error processing and adaptive responding

BOERGER N; VAN DER MEERE J

ELTON Martin, ed; BAND Guido, ed; FALKENSTEIN Michael, ed

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Journal: Biological psychology, 2000, 51 (2-3) 247-267

Language: English

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... associated with a state regulation deficit. For this purpose, 28 ADHD and 22 healthy children carried out two Go No-Go tests: one with a **fast** stimulus presentation rate, and the other with a slow stimulus presentation rate. Groups were compared on RT performance and on specific cardiac measures, reflecting arousal...

... No group difference in the arousal measure (mean heart rate) was found. Further, groups did not differ with respect to response inhibition: in both the **fast** and slow condition, ADHD children made comparable numbers of errors of commission to the control group, and the groups did not differ with respect to...

... the control group, indicating that less effort was allocated. No group differences in motor activation and effort allocation were found in the condition with a **fast** presentation rate of stimuli. We conclude, therefore, that a slow presentation rate of stimuli brings the ADHD child in a non-optimal activation state.

Broad Descriptors: Human; **Developmental stage** ; Motricity; Measurement method; **Cognition** ; Homme; Stade developpement; Motricite; Methode mesure; **Cognition** ; Hombre; Grado desarrollo; Motricidad; Metodo medida; Cognicion

19/3,K/48 (Item 8 from file: 144)

DIALOG(R)File 144:Pascal

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14223500 PASCAL No.: 99-0424639

What does the P300 brain response measure in children? New insight from stimulus sequence studies

KILPELAEINEN R; PARTANEN J; KARHU J

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Journal: Neuroreport : (Oxford), 1999, 10 (12) 2625-2630

Language: English

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THE decrease in the P300 brain response latency with increasing age is often taken to reflect maturation of **cognitive** processes in children. We found that in abnormally distractible children the auditory P300 latency decreased significantly when the inter-target interval (ITI) increased in a ...

... brain's orienting networks that are known to generate shorter latency brain responses. The relative strength by which the functionally different neural networks underlying the **cognitive** brain responses are activated may contribute significantly to the latency measures of these responses. The presumption that a short P300 latency equals to **fast** processing may thus be over-simplistic, especially in children.

Broad Descriptors: **Developmental stage** ; Electrophysiology; **Cognition** ; Vigilance; Perception; Human; Stade developpement; Electrophysiologie; **Cognition** ; Vigilance; Perception; Homme; Grado desarrollo; Electrofisiologia; Cognicion; Vigilancia; Percepcion; Hombre

19/3,K/49 (Item 9 from file: 144)

DIALOG(R)File 144:Pascal

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13141825 PASCAL No.: 97-0401375

Strategic control in developmental dyslexia

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Journal: Cognitive neuropsychology, 1997, 14 (3) 321-366

Language: English

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...that the existence of the two types of dyslexia is due to a deficiency in or a relative inefficiency of either of the two routes **postulated** in the dual-route theory of reading. The purpose of the present study was to assess whether dyslexic children have strategic control over the two reading routes. Twenty dyslexic children were asked to read aloud word lists and texts as **fast** or as accurately as possible. When reading **fast** as opposed to accurately, children showed an increase in number of word substitutions and a decrease in number of responses with sounding-out behaviours: In other words, they behaved more like phonological dyslexics in the **fast** condition, and more like surface dyslexics in the accuracy condition. Thus, the different symptoms commonly used as a basis for the classification of developmental dyslexia...

English Descriptors: Dyslexia; Strategy; **Cognitive** control; **Cognitive** disorder; Preadolescent; Developmental dyslexia

French Descriptors: Dyslexie; Strategie; Controle **cognitif** ; Trouble **cognition** ; Preadolescent; Dyslexie developpementale

Spanish Descriptors: Dislexia; Estrategia; Control **cognitivo** ; Trastorno **cognitivo** ; Preadolescente

19/3,K/50 (Item 10 from file: 144)

DIALOG(R)File 144:Pascal

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12917890 PASCAL No.: 97-0186367

Evidence against a dedicated system for word learning in children

MARKSON L; BLOOM P

Department of Psychology University of Arizona, Tucson, Arizona 85721, United States

Journal: Nature : (London), 1997, 385 (6619) 813-815

Language: English

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... of a new word on the basis of only a few incidental exposures and can retain this knowledge for a long period-a process dubbed ' **fast** mapping. It is often maintained that **fast** mapping is the result of a dedicated language mechanism, but it is possible that this same capacity might apply in domains other than language learning...

...about an object, and were tested on their retention immediately, after a 1-week delay or after a 1-month delay. Our findings show that **fast** mapping is not limited to word learning, suggesting that the capacity to learn and retain new words is the result of learning and memory abilities ...

Broad Descriptors: Human; **Developmental** stage ; Language; Acquisition process; **Cognition** ; Homme; Stade developpement; Langage; Processus acquisition; **Cognition** ; Hombre; Grado desarrollo; Lenguaje; Proceso adquisicion; Cognicion

19/3,K/51 (Item 11 from file: 144)
DIALOG(R)File 144:Pascal
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11868996 PASCAL No.: 95-0033097
**The neglected half of Alzheimer disease : cognitive and functional
concomitants of severe dementia**
AUER S R; SCLAN S G; YAFFEE R A; REISBERG B
New York univ. medical cent., aging dementia res. cent., New York NY
10016, USA
Journal: Journal of the American Geriatrics Society, 1994, 42 (12)
1266-1272
Language: English

**The neglected half of Alzheimer disease : cognitive and functional
concomitants of severe dementia**

English Descriptors: Test validation; Test reliability; Clinical test;
Cognitive disorder; Functional capacity; Methodology; Measurement method
; Mini Mental State Examination Folstein et al; Psychometrics; Elderly;
Alzheimer disease

French Descriptors: Validation test; Fidelite test; Test clinique; Trouble
cognition ; Capacite fonctionnelle; Methodologie; Methode mesure; Mini
Mental State Examination Folstein et al; Psychometrie; Vieillard; **Global
Deterioration Scale Reisberg** et al; Ordinal Scales of
Psychological Assessment Uzgis Hunt; Demence **Alzheimer**

Spanish Descriptors: Validacion prueba; Fidelidad prueba; Prueba clinica;
Trastorno **cognitivo** ; Capacidad funcional; Metodologia; Metodo medida;
Mini Mental State Examination Folstein et al; Psicometria; Anciano;
Demencia **Alzheimer**

19/3,K/52 (Item 12 from file: 144)
DIALOG(R)File 144:Pascal
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10650622 PASCAL No.: 93-0159906
**Differential validity of psychometric tests in dementia of the
Alzheimer type**
IHL R; FROELICH L; DIERKS T; MARTIN E M; MAURER K
Univ. Wuerzburg, dep. psychiatry, 8700, Federal Republic of Germany
Journal: Psychiatry research, 1992, 44 (2) 93-106
Language: English

**Differential validity of psychometric tests in dementia of the
Alzheimer type**

Forty-nine patients with a clinical diagnosis of probable **dementia** of
the **Alzheimer** type underwent an extensive test battery designed to
evaluate **cognitive** deficits according to NINCDS/ADRDA criteria. All
patients demonstrated signs of impairment on this test battery. One day
later, they were administered a second test battery that consisted of the
Mini-Mental State Examination (MMS), the **Alzheimer** 's Disease Assessment
Scale (ADAS), the SKT test (SKT), and the **Brief Cognitive Rating
Scale (BCRS)** to assess the construct validity, sensitivity, and possible
shortcomings of these tests

English Descriptors: Mini Mental State Examination; Test validation;
Construct validity; Psychometrics; Elderly; **Cognitive** disorder;

Diagnosis; **Alzheimer** disease; Exploration; **Brief Cognitive Rating Scale Reisberg** et al; **Alzheimer** Disease Assessment Scale Mohs et al; SKT Test Erzigkeit

French Descriptors: Mini Mental State Examination; Validation test; Validite construct; Psychometrie; Vieillard; Trouble **cognition** ; Diagnostic; Demence **Alzheimer** ; Exploration; **Brief Cognitive Rating Scale Reisberg** et al; **Alzheimer** Disease Assessment Scale Mohs et al; SKT Test Erzigkeit

Spanish Descriptors: Mini Mental State Examination; Validacion prueba; Validez construct; Psicometria; Anciano; Trastorno cognoscitivo; Diagnostico; Demencia **Alzheimer** ; Exploracion

19/3,K/53 (Item 13 from file: 144)
DIALOG(R)File 144:Pascal
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10198315 PASCAL No.: 92-0404109

Confrontation naming in Alzheimer 's patients : relation to disease severity

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Univ. Arizona, dep. speech hering sci., Tucson AZ 85721, USA

Journal: Psychology and aging, 1992, 7 (2) 197-203

Language: English

Confrontation naming in Alzheimer 's patients : relation to disease severity

Reports of **Alzheimer** 's disease patients in whom naming performance is disproportionate to other **cognitive** performances raise questions about the stage model, or **dementia** -severity level, for predicting naming performance. Thus, **dementia** severity as defined by **Global Deterioration Scale** ratings, Mini-Mental State Examination scores, and combinations of them was evaluated as a predictor of naming performance in 102 **Alzheimer** 's patients and was found to account for approximately 1/3 of performance variability. Additional contributions from age of onset , duration, family history, and gender...

English Descriptors: Language disorder; Naming; **Alzheimer** disease; Prediction; Aptitude test; Mini Mental State Test Folstein McHugh; Boston Naming Test; Age of onset; Duration; Family story; Sex; **Cognitive** disorder; Degenerative disease; Nervous system diseases; Elderly; **Global Deterioration Scale Reisberg** et al

French Descriptors: Trouble langage; Denomination; Demence **Alzheimer** ; Prediction; Test aptitude; Mini Mental State Test Folstein McHugh; Boston Naming Test; Age apparition; Duree; Histoire familiale; Sexe; Trouble **cognition** ; Maladie degenerative; Systeme nerveux pathologie; Vieillard; **Global Deterioration Scale Reisberg** et al

Spanish Descriptors: Trastorno lenguaje; Denominacion; Demencia **Alzheimer** ; Prediccion; Prueba aptitud; Mini Mental State Test Folstein McHugh; Boston Naming Test; Edad aparicion; Duracion; Historia familiar; Sexo; Trastorno cognoscitivo; Enfermedad degenerativa; Sistema nervioso patologia...

19/3,K/54 (Item 14 from file: 144)
DIALOG(R)File 144:Pascal

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09933257 PASCAL No.: 92-0143095

An empirical evaluation of the global deterioration scale for staging Alzheimer 's disease

EISDORFER C; COHEN D; PAVEZA G J; ASHFORD J W; LUCHINS D J; GORELICK P B; HIRSCHMAN R S; FREELS S A; LEVY P S; SEMLA T P; SHAW H A

Univ. Miami, dep. psychiatry, Miami FL 33101, USA

Journal: (The) American journal of psychiatry, 1992, 149 (2) 190-194

Language: English Summary Language: English

An empirical evaluation of the global deterioration scale for staging Alzheimer 's disease

Objective: Although the **Global Deterioration Scale** has been widely used since its publication in 1982, its stages are based on implicit assumptions about the linearity, temporality, and interdependence of **cognitive**, functional, and behavioral impairment in **Alzheimer 's** disease. The authors evaluated the validity of these assumptions and tested the hypothesis that psychopathology and functional impairment would occur in earlier stages than the **Global Deterioration Scale** predicts

English Descriptors: **Alzheimer** disease; Degenerative disease; Nervous system diseases; Evaluation scale; Aptitude test; Evolution; Prediction; Psychometrics; Human; **Global Deterioration Scale Reisberg** et al

French Descriptors: Demence **Alzheimer**; Maladie degenerative; Systeme nerveux pathologie; Echelle evaluation; Test aptitude; Evolution; Prediction; Psychometrie; Homme; **Global Deterioration Scale Reisberg** et al

Spanish Descriptors: Demencia **Alzheimer**; Enfermedad degenerativa; Sistema nervioso patologia; Escala evaluacion; Prueba aptitud; Evolucion; Prediccion; Psicometria; Hombre

19/3,K/55 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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15144369 PMID: 14710447

[Relationship between arterial pressure and cognitive functions. Data for the French Network on Alzheimer 's disease (REAL.FR)]

Relations entre la pression arterielle et les fonctions **cognitives**. Donnees du Reseau francais sur la maladie d' **Alzheimer** (REAL.FR).

Hanon O; Latour F; Seux M L; Lenoir H; Forette F; Rigaud A S

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La Revue de medecine interne / fondee ... par la Societe nationale francaise de medecine interne (France) Oct 2003, 24 Suppl 3 p292s-300s, ISSN 0248-8663 Journal Code: 8101383

Publishing Model Print

Document type: Journal Article; Multicenter Study; English Abstract

Languages: FRENCH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[Relationship between arterial pressure and cognitive functions. Data for the French Network on Alzheimer 's disease (REAL.FR)]

Relations entre la pression arterielle et les fonctions **cognitives**. Donnees du Reseau francais sur la maladie d' **Alzheimer** (REAL.FR).

The relationships between arterial hypertension and **cognitive** decline are complex and studies indicate controversial results. OBJECTIVES: To evaluate, in a cross sectional study, the relationships between **cognitive** functions and blood pressure in a population of subjects with **Alzheimer**'s disease. METHODS: In 520 subjects of a survey in a French population with **Alzheimer**'s disease, relationships between the severity of **cognitive** decline and a history of hypertension or blood pressure level have been searched. **Cognitive** functioning was assessed with validated neuropsychological tests evaluating **cognitive** functions and the capacities in the activities of daily living (Mini Mental State Examination (MMSE), **Alzheimer**'s Disease Assessment Scale-- **Cognitive** part (ADAS-Cog), Instrumental Activities of Daily Living (IADL), Activities of Daily Living (ADL), Clinical **Dementia** Rating (CDR), **Global Deterioration Scale** (**GDS**) of **Reisberg**). In 456 subjects blood pressure was measured during the consultation. RESULTS: The results indicate that after adjustment on age, sex, education level, and the other cardiovascular risk factors, subjects with a history of hypertension have a more marked **cognitive** decline than subjects without history of hypertension. Indeed, in subjects with a history of hypertension, the **cognitive** impairment and its consequences on activities of daily living are more important than in subjects without history of hypertension (ADAS-cog 19.02 +/- 8.48...
... 94 +/- 3.29 vs 6.19 +/- 3.26 p = 0.03; global CDR 1.18 +/- 0.62 vs 1.05 +/- 0.60, p = 0.03, **GDS** of **Reisberg** 4.41 +/- 0.74 vs 4.27 +/- 0.75, p = 0.05). In contrast, no relation between blood pressure measurements and **cognitive** function is observed, and moreover an inverse correlation between blood pressure and consequences on activities of daily living is found. CONCLUSIONS: This work indicates that relationships between blood pressure and **cognitive** functions are more complex than a simple linear relation. The present results show that a history of arterial hypertension is associated with a more marked **cognitive** decline in subjects with **Alzheimer**'s disease. In contrast, when the **Alzheimer**'s disease is already developed no relation between blood pressure and **cognitive** functions appears and moreover an inverse correlation with the consequences on activities of daily living is found.

Descriptors: ***Alzheimer** Disease--physiopathology--PP; * **Alzheimer** Disease--psychology--PX; *Blood Pressure; * **Cognition** ; Aged; **Alzheimer** Disease--complications--CO; **Cognition** Disorders--complications--CO; Cross-Sectional Studies; France; Humans; Hypertension--complications--CO; Prospective Studies

19/3,K/56 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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14142686 PMID: 11924332

Diagnosing and treating Alzheimer 's disease: a practitioner's overview.

Langbart Cynthia

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Journal of the American Academy of Nurse Practitioners (United States)

Mar 2002, 14 (3) p103-9; quiz 110-2, ISSN 1041-2972 Journal Code: 8916634

Publishing Model Print

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Diagnosing and treating Alzheimer 's disease: a practitioner's overview.

PURPOSE: To provide an overview of current diagnostic protocols of Alzheimer 's disease (AD), screening techniques, tests, and a review of standard and new treatments. DATA SOURCES: Selected articles from the scientific literature, online sources, and...

... Mental State Evaluation, and the 7-Minute Screen, are useful in the primary care setting for screening elderly patients. Other tools, such as the Clinical **Dementia** Rating (CDR) and the **Global Deterioration Scale** , are useful for staging and monitoring progression of disease and response to treatment. Clinical diagnostic testing is still in **developmental stages** , but the hope is to have a reliable and objective diagnostic tool in order to diagnose AD in the earliest stages. IMPLICATIONS FOR PRACTICE: The...

Descriptors: *Alzheimer Disease--diagnosis--DI; * Alzheimer Disease --drug therapy--DT; Cholinergic Agents--therapeutic use--TU; **Cognition** ; Depression--diagnosis--DI; Humans; Neuropsychological Tests

19/3,K/57 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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13878705 PMID: 11563631

Choline acetyltransferase activity and striatal dopamine receptors in Parkinson's disease in relation to cognitive impairment.

Mattila P M; Roytta M; Lonnberg P; Marjamaki P; Helenius H; Rinne J O
Department of Neurology, University of Turku, Finland.
Acta neuropathologica (Germany) Aug 2001, 102 (2) p160-6, ISSN 0001-6322 Journal Code: 0412041
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Choline acetyltransferase activity and striatal dopamine receptors in Parkinson's disease in relation to cognitive impairment.

... 36 age-matched controls was examined for choline acetyltransferase (ChAT) activity, and for densities of D1 and D2 dopamine receptors. Brain samples were examined for **Alzheimer 's** disease (AD) type changes and for Lewy bodies (LBs), and for apolipoprotein E genotype. Patients were evaluated for the stage of **cognitive** impairment using **Reisberg 's global deterioration scale** . ChAT activity in PD was reduced in all brain areas examined, being 51% of the control mean in the hippocampus ($P<0.001$), 57% in...

... 05). The reduction in ChAT activity in the prefrontal cortex had a significant negative correlation ($r=-0.38$, $P=0.012$) with the extent of **cognitive** impairment. When the CERAD class 'C' was excluded, **cognitive** impairment correlated significantly with both prefrontal ChAT activity ($r=-0.52$, $P=0.0051$) and the density of D1 dopamine receptors in the caudate nucleus...

... controls. An increased D2 receptor number was found in the caudate nucleus and putamen in PD patients treated with neuroleptics. The present study showed that **cognitive** decline in PD is associated with reduced ChAT activity in the prefrontal cortex and the D1 dopamine receptor number in the caudate nucleus, even in...

Descriptors: *Choline O-Acetyltransferase--metabolism--ME; * **Cognition** Disorders--enzymology--EN; *Neostriatum--enzymology--EN; *Neurons

--enzymology--EN; *Parkinson Disease--enzymology--EN; *Receptors, Dopamine
--metabolism--ME; Aged; **Alzheimer** Disease--complications--CO; **Alzheimer**
Disease--enzymology--EN; **Alzheimer** Disease--pathology--PA; Apolipoprote
ins E--metabolism--ME; Caudate Nucleus--enzymology--EN; Caudate Nucleus
--pathology--PA; Caudate Nucleus--physiopathology--PP; **Cognition**
Disorders--complications--CO; **Cognition** Disorders--pathology--PA;
Hippocampus--enzymology--EN; Hippocampus--pathology--PA; Hippocampus
--physiopathology--PP; Humans; Lewy Bodies--enzymology--EN; Lewy Bodies
--pathology--PA; Neostriatum--pathology--PA; Neostriatum...

19/3,K/58 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.

13066688 PMID: 11036510
[**Hypernatremia in the aged: clinical characteristics**]
L'hypernatremie chez les sujets ages. Caracteristiques cliniques.
Gonthier R; Hacini F; Beauchet O; Ferron C; Imler D
Service de Gerontologie clinique, CHU de Saint-Etienne.
Regis.Gonthier@univ-st-etienne.fr
Presse medicale (Paris, France - 1983) (FRANCE) Sep 9 2000, 29 (25)
p1391-6, ISSN 0755-4982 Journal Code: 8302490
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: FRENCH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... 9% were suffering from diarrhea or vomiting. Most of the patients had
disabling chronic illnesses (62% loss of two or more ADL of Katz), severe
dementia (84% level = 6 on the **Reisberg global deterioration scale**
). In spite of fluid replacement and follow-up treatment, outcome was poor:
62% of the patients died within three months. CONCLUSION: Besides digestive
and renal losses, hypernatremia in elderly patients is increased by fluid
supply disorders consecutive to hypodipsia contracted at the same time as
disability and **dementia**. Hypodipsia is a sign of poor prognosis.
Prevention must be undertaken early, emphasizing the importance of
identifying dehydration early among elderly people with chronic disabling
...

19/3,K/59 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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12785325 PMID: 10718099
**Pharmacology of AMPA/kainate receptor ligands and their therapeutic
potential in neurological and psychiatric disorders.**
Lees G J
Department of Psychiatry and Behavioural Science, University of Auckland
School of Medicine, New Zealand. gj.lees@auckland.ac.nz
Drugs (NEW ZEALAND) Jan 2000, 59 (1) p33-78, ISSN 0012-6667
Journal Code: 7600076
Publishing Model Print
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

It has been **postulated** , consistent with the ubiquitous presence of glutamatergic neurons in the brain, that defects in glutamatergic neurotransmission are associated with many human neurological and psychiatric disorders...

... AMPA) and kainate (KA) receptors to minimise the pathology and/or symptoms of various diseases. Glutamate activation of AMPA receptors is thought to mediate most **fast** synaptic neurotransmission in the brain, while transmission via KA receptors contributes only a minor component. Variants of the protein subunits forming these receptors greatly extend...

; Animals; Arousal--drug effects--DE; **Cognition** --drug effects--DE; Humans; Memory--drug effects--DE; Receptors, AMPA--analysis--AN; Receptors, AMPA--chemistry--CH; Receptors, Kainic Acid--analysis--AN; Receptors, Kainic Acid--chemistry...

19/3,K/60 (Item 6 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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11501548 PMID: 8974721

[**Effectiveness of brief infusions with Ginkgo biloba Special Extract EGb 761 in dementia of the vascular and 0 Alzheimer type**]

Wirksamkeit kurzdauernder Infusionsbehandlungen mit Ginkgo-biloba-Spezial extrakt EGb 761 bei Demenz vom vaskularen und **Alzheimer** -Typ.

Haase J; Halama P; Horr R

Universitätsklinikum Charite Klink für Innere Medizin, Berlin.

Zeitschrift für Gerontologie und Geriatrie - Organ der Deutschen Gesellschaft für Gerontologie und Geriatrie (GERMANY) Jul-Aug 1996, 29

(4) p302-9, ISSN 0948-6704 Journal Code: 9506215

Publishing Model Print

Document type: Clinical Trial; Journal Article; Randomized Controlled Trial ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[**Effectiveness of brief infusions with Ginkgo biloba Special Extract EGb 761 in dementia of the vascular and Alzheimer type**]

Wirksamkeit kurzdauernder Infusionsbehandlungen mit Ginkgo-biloba-Spezial extrakt EGb 761 bei Demenz vom vaskularen und **Alzheimer** -Typ.

In a placebo-controlled, randomized, double-blind clinical trial, 40 patients with a mean age of 68 (+/- 12.5) years suffering from moderate **dementia** (**Alzheimer** , vascular, or mixed type) according to DSM-III-R criteria were included. Severity of the disease had to correspond to stages 4 or 5 of **Reisberg** 's **Global Deterioration Scale** . Infusions of either EGb 761 or placebo were administered 4 days per week for 4 weeks. Primary outcome measure was the activities of daily living...

... could be shown on three planes of assessment: the behavioral, the psychopathologic and the psychometric plane. It could be confirmed that, in patients with moderate **dementia** , short-term intravenous infusion therapy with EGb 761 results in an improvement of psychopathology and **cognitive** performance, which is reflected in an increased ability to cope with the demands of daily living.

Descriptors: ***Alzheim** r Disease--drug therapy--DT; * **Dementia** , Multi-Infarct--drug therapy--DT; *Free Radical Scavengers--administration and dosage--AD; *Plant Extracts--administration and dosage--AD; Activities of Daily Living--classification--CL; Aged; Aged, 80 and over; **Alzheimer** Disease--diagnosis--DI; **Dementia** , Multi-Infarct--diagnosis--DI;

Disability Evaluation; Dose-Response Relationship, Drug; Double-Blind Method; Drug Administration Schedule; Humans; Infusions, Intravenous; Middle Aged; Neuropsychological Tests; Treatment Outcome

19/3,K/61 (Item 7 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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11192187 PMID: 8548645

[The evaluation of the temporal lobe size by magnetic resonance in Alzheimer 's disease]

Estimacion del tamano del lobulo temporal por resonancia magnetica en la enfermedad de **Alzheimer** .

Rodriguez R M; Aldrey J M; Pumar J M; Lema M; Noya M

Servicio de Neurologia, Hospital General de Galicia Clinico Universitario, Santiago de Compostela.

Revista de neurologia (SPAIN) Jan-Feb 1995, 23 (119) p59-61, ISSN 0210-0010 Journal Code: 7706841

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: SPANISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[The evaluation of the temporal lobe size by magnetic resonance in Alzheimer 's disease]

Estimacion del tamano del lobulo temporal por resonancia magnetica en la enfermedad de **Alzheimer** .

The estimation of the size of the structures of the temporal lobe using magnetic resonance (MR) can be of assistance when diagnosing early degenerative **dementia** . We have carried out a survey on 17 patients with **Alzheimer** type **dementia** (ATD). They were classified in clinical stages according to the **Reisberg global deterioration scale** . As diagnostic criteria for ATD we used those developed by DSM-III-R and NINCDS-ADRDA. We carried out axial sequences of 10 mm thickness...

... craneum). The images were processed by means of a computer programme. The average area of both hypofields in patients at stages 3-5 on the **Reisberg** scale was 378.6 +/- 86.1 mm² and in stages 6-7 was of 364.7 +/- 62.2 mm². The average area of both temporal...

... stages 6-7, was of 1,945.0 +/- 303.3 mm². The shrinkage in size of the temporal lobe and the hippocampus in patients with **Alzheimer 's disease** was not found to be related with the degree of **dementia** .

Descriptors: ***Alzheime** r Disease--diagnosis--DI; *** Alzheimer** Disease --physiopathology--PP; ***Magnetic Resonance Imaging**; ***Temporal Lobe** --physiopathology--PP

19/3,K/62 (Item 8 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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10804366 PMID: 7801035

[Neuropathology of 20 centenarians. I. Clinical data]

Neuropathologie de 20 centenaires. I. Donnees cliniques.

Fayet G; Hauw J J; Delaere P; He Y; Duyckaerts C; Beck H; Forette F; Gallinari C; Laurent M; Moulias R; et al

Laboratoire de Neuropathologie Raymond Escourolle, INSERM U 360, Hopital

de la Salpetriere, Paris.

Revue neurologique (FRANCE) 1994, 150 (1) p16-21, ISSN 0035-3787
Journal Code: 2984779R
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: FRENCH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

...the basis of a retrospective evaluation of clinical records, and of an inquiry among the caring staff. Their mental status was also evaluated by the **Global Deterioration Scale** of **Reisberg** et al (1985). Five patients had been demented, four had been intellectually normal, and 11 had suffered from mild disturbances of memory or **cognitive** functions. This series was not representative of the general population of centenarians, but probably of those institutionalized in France. We observed a low proportion of demented patients despite the prevalence expected from epidemiological studies. This is difficult to interpret. The low proportion of **dementia** in this small sample is not due to the short duration of the course of diseases responsible for **dementia** .(ABSTRACT TRUNCATED AT 250 WORDS)

Descriptors: *Aged, 80 and over; * **Dementia** --epidemiology--EP; *Mental Competency

19/3,K/63 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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09653569 PMID: 1778496

TOPS: a consumer approach to Alzheimer 's respite programs.
Ehrlich P; White J
Benjamin Rose Institute, Cleveland, OH 44115-1989.
Gerontologist (UNITED STATES) Oct 1991, 31 (5) p686-91, ISSN 0016-9013 Journal Code: 0375327
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

TOPS: a consumer approach to Alzheimer 's respite programs.
Time Off Promotes Strength (TOPS), a program for caregivers of **Alzheimer** 's victims, provides in-home and day program services. Through application of a service/training model adapted from the **Global Deterioration Scale** (**Reisberg** , 1983), the TOPS program maintains a high quality of services with a limited but highly trained professional staff. Caregiver independence and autonomy are emphasized, as...

Descriptors: ***Alzheim** r Disease; *Caregivers; *Respite Care--methods
--MT
?

10/3,K/12 (Item 2 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01881186 SUPPLIER NUMBER: 58736044 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Mild cognitive impairment: conceptual basis and current nosological status.

Ritchie, Karen; Touchon, Jacques
The Lancet, 355, 9199, 225
Jan 15,
2000

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0099-5355
LANGUAGE: English RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE:
Professional
WORD COUNT: 4051 LINE COUNT: 00368

Mild cognitive impairment: conceptual basis and current nosological status.

ABSTRACT: The authors discuss mild **cognitive** impairment (MCI) as a concept often mentioned in clinical research and believe it should be defined and classified in order to be more effectively treated. It refers to minor complaints of loss of memory function in elderly people, and may indicate a high probability of evolving towards **Alzheimer** 's disease. This identification of people at potential risk of **dementia** with is important because it may reduce distress for both patient and family, minimize the risk of accidents, prolong autonomy, and perhaps even ultimately prevent...

TEXT:

Mild **cognitive** impairment (MCI) is a widely cited concept in clinical research on ageing-related **cognitive** disorder. It refers generally to subclinical complaints of memory functioning in elderly people, which are judged to have a high probability of evolving towards **Alzheimer** 's disease. The identification of people at potential risk of **dementia** with a view to early therapeutic intervention is important, because it may lessen distress for both patient and family, minimise the risk of accidents, prolong...

...therapeutic intervention is also of particular interest to the pharmaceutical industry because it defines a potential consumer market for cholinesterase inhibitors, and other drugs mediating **dementia** -related **cognitive** decline, that is much larger than that for **Alzheimer** 's disease. Many research reports on MCI are being published. However, there seems to be little consensus on its conceptual basis or diagnostic algorithms. There...

... carefully considered, and that MCI should be located conceptually among the many other existing and overlapping concepts that have been applied to elderly people with **cognitive** disorders. The aims of this viewpoint are to describe the conceptual basis of MCI, to clarify its underlying assumptions and its relation to other similar...

...of standardised case identification. Finally, we look at the potential usefulness and drawbacks of developing MCI as a separate nosological entity.

Current concepts of subclinical **cognitive** impairment

Cognitive impairment without **dementia** is so common among elderly people that it has come to be thought of as an inevitable feature of the ageing process. It has, nonetheless, acquired clinical significance because of the difficulties patients may have with carrying out everyday activities. Although the range of impairments seen in populations without

dementia is extremely broad, several clinical labels have been proposed to describe this tail-end of the normal **cognitive** range (table), which have promoted the notion of a homogeneous entity. One of the earliest was benign senescent forgetfulness proposed by Kral(1) to denote...

...of remote as opposed to recent events, and awareness of memory problems. The first attempt at standardisation of formal diagnostic criteria for normal ageing-related **cognitive** change was undertaken by Crook and colleagues in 1986(2) for the National Institute of Mental Health, who developed the notion of age-associated memory...

...and colleagues(4) criticised age-associated memory impairment as being too restrictive a concept in terms of the nature of the deficit, pointing out that **cognitive** impairment in elderly people does occur in functions other than memory, and that memory impairment itself commonly occurs with other deficits. An alternative concept of ageing-associated **cognitive** decline has thus been proposed by these researchers in collaboration with the International Psychogeriatric Association and the World Health Organization.(4) Ageing-associated **cognitive** decline refers to a wider range of **cognitive** functions (attention, memory, learning, thinking, language, and visuospatial function), and is diagnosed by reference to norms for elderly people. Application of ageing-associated **cognitive** decline and age-associated memory impairment to elderly people within the general population suggests that they are distinct clinical entities, the former referring to a more severe state of impairment.(5) Within the Diagnostic and Statistical Manual IV (DSM IV)(6) a related concept of age-related **cognitive** decline has also been elaborated, which is similar to ageing-associated **cognitive** decline in that it refers to an objective decline in **cognitive** functioning due to the physiological process of ageing. Age-related **cognitive** decline remains a somewhat vague concept, which has not been given the strict operational criteria of deviation from a population norm that have been specified for age-associated memory impairment, late-life forgetfulness, and ageing-associated **cognitive** decline. Age-related **cognitive** decline is presently defined as a complaint of difficulties in recalling names and appointments or in problem-solving, which cannot be related to a specific mental problem or a neurological disorder.

These concepts are all based on a normality model; such mild **cognitive** deficits are judged to fall within the limits of normal ageing. However, may not **cognitive** deficits of this type be partly due to underlying disease, which might be differentiated from normal ageing-related physiological changes? Other concepts have been proposed, which link mild states of **cognitive** impairment to pathological states. Within the tenth revision of the International Classification of Diseases (ICD),(7) criteria are given for mild **cognitive** disorder, which refer to disorders of memory and learning and concentration. These disorders are often accompanied by mental fatigue, which must be shown by formal neuropsychological testing and be attributable to cerebral disease or damage, or systemic physical disease known to cause dysfunction. Mild **cognitive** disorder is thus construed as being secondary to physical illness or impairment, excluding **dementia**, amnesic syndrome, concussion, or postencephalitic syndrome. Mild **cognitive** disorder is also applicable to people of all ages. Early attempts to apply criteria for mild **cognitive** disorder to population studies of elderly people have been unsuccessful, which has cast doubt on the usefulness of mild **cognitive** disorder as a separate nosological entity(8) for this age group. DSM IV(6) proposed a similar entity, mild neurocognitive disorder, which encompasses not only memory and learning difficulties, but also perceptual-motor, linguistic, and central executive functions.

The Canadian Study of Health and Aging referred to " **cognitive**

impairment no **dementia** ", which is identified on the basis of neuropsychological testing and clinical examination.(9) Patients with this disorder, like those with mild **cognitive** disorder and mild neurocognitive disorder, have impairment attributable to an underlying physical disorder. Also in this group are patients with a circumscribed memory impairment, which is a modified form of age-associated memory impairment. **Cognitive** impairment no **dementia** encompasses a wider range of underlying abnormalities than mild **cognitive** disorder and mild neurocognitive disorder, including disorders such as delirium, substance abuse, and psychiatric illness, which are excluded from the ICD and DSM categories. **Cognitive** impairment no **dementia** seems to refer to elderly people only, although this criterion has not been explicitly stated.

Mild **cognitive** impairment: operational definitions and clinical status

What is the place of MCI amid these many and overlapping concepts and what can it add that is not already covered by existing terminology? MCI, like mild **cognitive** disorder and **cognitive** impairment no **dementia** , is based on a pathological model of **cognitive** change. Like **cognitive** impairment no **dementia** , it is applicable to **cognitive** impairment in elderly people only. MCI is not generally thought to be a direct consequence of systemic disease, but may be a significant risk factor for senile **dementia** , in particular **Alzheimer** 's disease. It thus seems at this time to be theoretically closest to the notion of **cognitive** impairment no **dementia** . Beyond this, specific diagnostic criteria are inconsistent. Petersen and colleagues(10) initially used the term to refer to complaints of defective memory and demonstration of abnormal memory functioning for age, with normal general **cognitive** functioning and conserved ability to carry out activities of daily living. A later definition referred to memory impairment beyond that expected for both age and educational achievement.(11) Another approach has been to define MCI in terms of early-stage **dementia** . For example Krasuki and colleagues(12) referred to **cognitive** impairment with a score of 20 or more on the mini mental state examination, and Zaudig(13) defined MCI as a score of more than 22 on the mini mental state examination, or 34 to 47 on the SIDAM (structured interview for the diagnosis of **dementia**) **dementia** scale. Others have referred to criteria based on clinical **dementia** rating scales or **global deterioration scale** scores.(14,15)

Apart from the general absence of standardised diagnostic criteria, there are two central conceptual issues relating to MCI that remain unresolved. Firstly, whether or not MCI should be confined exclusively to isolated memory impairment. Secondly, is MCI a prodrome of **Alzheimer** 's disease, or is it a clinically heterogeneous group at increased risk of **dementia** due to any cause? Petersen and colleagues(11) specified that in MCI general intellectual functioning should be preserved, and that only memory should be affected since the restriction of the impairment to mnesic abilities is what differentiates the syndrome from **Alzheimer** 's disease (in this case, why has the more precise term of mild memory impairment not been used?). Isolated memory impairment was recorded in a...

...somewhat circular. There is also the clinical problem of the non-specificity of neuropsychometric testing; difficulties on a memory task may be attributable to other **cognitive** difficulties, in particular attentional, central executive, and comprehension impairments. Other researchers have noted that patients with MCI, although having primarily memory complaints, also commonly show...

...Although there is evidence that a purely mnesic syndrome may exist,(5) such patients represent only a very small proportion (6%) of elderly people with **cognitive** deficits when the full range of **cognitive** functions is examined. Higher rates of circumscribed memory deficit (31.7% of **cognitive**

impairment no **dementia** cases) were observed within the Canadian longitudinal study,(9) but only patients with a score below cut-off on the mini mental state examination were examined, and the test battery itself consists predominantly of memory tasks.

With regard to the extent to which MCI may be a prodromal phase of **dementia** , several studies have suggested a significantly increased risk of **Alzheimer** 's disease in MCI patients, with estimates of 10% to 15% of MCI patients developing **dementia** in 1 year,(11) 40% over 2 years,(17) 20% over 3 years,(16) 30% over 3 years,(18) 53% over 3 years,(19) and...

...were, however, all based on small hospital-based series, and there is currently little evidence from representative general population studies. Risk factors for progression to **Alzheimer** 's disease derived from larger-scale studies are possession of the ApoE 4 allele, age, fine motor deficit, and low premorbid intelligence quotient.(11,15,20,21) Survival rates for MCI patients over a 7-year period were midway between those for normal elderly people and **Alzheimer** 's disease patients, with a cumulative mortality risk twice that of the general population.(22) From these studies, MCI seems to be mainly construed as a risk factor for **Alzheimer** 's disease. Although some studies have referred more generally to "**dementia** risk" without further precision, its relation to other forms of **dementia** has not specifically been examined.

General support for the notion that MCI is at least some form of neurological disorder has come from cerebral imaging...

...perfusion and left/right parietal-temporal asymmetry in MCI.(23) The observed hypoperfusion was intermediate between that found in normal people and in patients with **Alzheimer** 's disease. Patients with **Alzheimer** 's disease were found to have atrophy and lower cerebral blood flow in both medial temporal and temporoparietal regions than MCI patients, whereas MCI patients showed significant reduction in cerebral blood flow without atrophy in the temporoparietal region only.(24) Electroencephalography showed similarities between **Alzheimer** 's disease and MCI which differentiated both groups from normal elderly people on temporoparietal coherence and a and U relative power.25 These findings suggest that MCI and **Alzheimer** 's disease have similar anatomical locii, with MCI being differentiated mainly by degree of impairment, and functional, rather than structural change.

In a 3-year follow-up study, 64% of MCI patients had abnormal SPECT scans at baseline.(19) 53% of this cohort developed **dementia** , but of those only 67% had initially ...thus the positive predictive value of the scan was 50%. The researchers suggested that identification of MCI by Spect may not be useful in predicting **dementia** , although the study was based on only 27 patients, and depression may have been a confounding variable. On the other hand, progression from MCI to **dementia** was predicted on the basis of SPECT perfusion levels from four regions: the hippocampal-amygdaloid complex, the anterior and posterior cingulate, and the anterior thalamus. The researchers concluded that with semiquantitative analysis and a spatial resolution sufficient to detect perfusion in limbic structures, MCI can be differentiated from **Alzheimer** 's disease.

Conclusion

There is evidence that elderly people with subclinical **cognitive** deficit show anatomical and structural changes that can be differentiated from both normal ageing and **Alzheimer** 's disease, although these differences are predominantly quantitative. The extent of these changes is difficult to assess because case-identification criteria differ and the non-study samples are non-representative. There is also evidence that elderly people with MCI are at high risk of **Alzheimer** 's disease, although in many studies case-selection strategies are based on screening instruments for **Alzheimer** 's disease, thus introducing a significant bias

in the estimation of risk. If MCI is to survive as a viable clinical classification, increasing rigor must be introduced into its definition, case-finding criteria, and **cognitive** assessment. MCI has been defined by the tests used to measure it, and the results of these measures have then been used as validation of...

...tautology and self-fulfilling prophecy.

What does MCI offer that is not covered by the current plethora of concepts? The definition of MCI covers subclinical **cognitive** change that is potentially pathological, being a possible forerunner to senile **dementia**, but supposedly unrelated to other underlying systemic diseases. Given the small proportion of elderly people who have persistent, isolated memory impairment, perhaps MCI can be more usefully thought of as a significant deficit in any **cognitive** domain. In this case MCI would be almost identical to ageing-associated **cognitive** decline, except for the underlying assumption that it is not part of a normal ageing process. In this respect it is closer to the notion of **cognitive** impairment no **dementia**, but that term has been used in only one ageing study and currently lacks clear defining criteria. **Cognitive** impairment no **dementia** patients are also screened with a **dementia** screening test, which biases selection towards subclinical cases of **Alzheimer**'s disease. Measurement criteria for ageing-associated **cognitive** decline may be useful for the determination of MCI, with the **caveat** that underlying abnormalities that might contribute to the **cognitive** loss should be identified.

Within a research context, specification of certain neuropsychological tests for the identification of MCI may be important. This approach will at...

...associated morbidity. From a clinical viewpoint, test standardisation may be less satisfactory, since individual patients may present with a severe deficit in a subsystem of **cognitive** functioning not covered by the tests selected. In any case, neuropsychological testing procedures should be as comprehensive as possible in their assessment of **cognitive** functioning in elderly people, and should also be separate from instruments used for diagnosis of **Alzheimer**'s disease, to permit a clearer understanding of the relation between the two.

A final issue is the potential usefulness of MCI as a separate nosological entity. On the one hand, the notion that subclinical **cognitive** deficit is pathological as opposed to a normal ageing process, opens the way to active rather than palliative care. Effective pharmaceutical management may be extended...

...to meet criteria for treatment. Disease onset may thus be postponed, or perhaps even avoided. Effective treatment of MCI may modify current concepts of normal **cognitive** functioning in elderly people towards expectations of greater competence. For society, such change could affect attitudes to elderly people. For health-care provision, it could...

...states due to environmental factors risk being erroneously raised to the status of a disease. This may in turn give rise in elderly people to **cognitive** hypochondriasis or a morbid concern with occasional difficulties of no clinical importance. Does MCI really constitute a separate and homogeneous clinical syndrome or is it...

...new syndrome and related syndromes by discriminant function analysis. Such a syndrome validation analysis has not yet been carried out.

The legal implications of conceptualising **cognitive** impairment as pathological may also be complex. The pharmaceutical industry is obviously a strong driving force behind the promotion of MCI as a separate

nosological...

...a clear need for a consensus statement on the diagnosis of MCI that involves not only clinicians and researchers in the field of ageing-related **cognitive** deterioration, but also specialists in nosological classification and legal issues, who must above all identify the clinical population most likely to benefit from the application...diagnosing age associated memory impairment: proposed improvements from the field. Dev Neuropsychol 1989; 5: 295-306.

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Concept	Investigator	Criteria	
Benign senescent forgetfulness	Kral(1)	Memory complaints	
Age-associated memory impairment	Crook et al((2)	Memory impairment shown by decrement on formal cognitive	
test			
Late-life forgetfulness	Blackford and LaRue(3)	As age-associated memory impairment but greater decrement on 50% of a specified test battery	
Ageing-associated cognitive decline	Levy et al(4)	Impairment on any formal cognitive test	
Ageing-related cognitive decline	DSM IV(6)	Objective decline in functioning	
Mild cognitive decline			
decline ICD-10(7)	Disorders of memory learning and concentration shown by testing		
Mild neurocognitive decline	DSM IV(6)	Difficulties in memory learning, perceptual-motor linguistic, and central executive functioning	
Cognitive impairment no dementia	Graham et al(9)	Circumscribed memory impairment and low MMSE score	
Mild cognitive impairment	Petersen et al(10)	Complaints of defective memory, a deficit on tests, and normal general intellectual functioning	
cognitive			

cognitive decline
Ageing-related **cognitive** decline No
Mild **cognitive** decline No
Mild neurocognitive decline No
Cognitive impairment no Yes
dementia
Mild **cognitive** impairment No

MMSE=mini mental state examination.

Glossary of entities designating **cognitive** impairment in elderly people without **dementia**

DESCRIPTORS: **Cognition** disorders...

10/3,K/6 (Item 6 from file: 11)

DIALOG(R)File 11:PsycINFO(R)

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Wanderers: Features, findings, issues

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...ABSTRACT: more agitated. Neuropsychiatric inventory (NPI) agitated behavior score was higher in wanderers than in non-wanderers. NPI agitated behavior total score positively correlated with Bedford **Alzheimer** nursing severity scale (BANSS), so that most functionally deteriorated persons showed more aberrant motor behavior. Wandering looks associated with an anamnesis positive for **dementia** in patients' fathers. Cluster analysis showed a correlation of wandering with the agitated behavior. Yet, wandering was in a cluster by itself. Wanderers fell thrice...

...shown by the cumulative illness rating scale. The use of neurotropic drugs strongly correlated with behavioral disturbances, but not with wandering. In conclusion, most links **postulated** by theoretical perspectives were confirmed. (PsycINFO Database Record (c) 2004 APA, all rights reserved)

...DESCRIPTORS: **Dementia** ; *

...IDENTIFIERS: **dementia** ;

CITED REFERENCES:

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Mild cognitive impairment: conceptual basis and current nosological status.

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Mild cognitive impairment: conceptual basis and current nosological status.

ABSTRACT: The authors discuss mild **cognitive** impairment (MCI) as a concept often mentioned in clinical research and believe it should be defined and classified in order to be more effectively treated. It refers to minor complaints of loss of memory function in elderly people, and may indicate a high probability of evolving towards **Alzheimer** 's disease. This identification of people at potential risk of **dementia** with is important because it may reduce distress for both patient and family, minimize the risk of accidents, prolong autonomy, and perhaps even ultimately prevent...

TEXT:

Mild **cognitive** impairment (MCI) is a widely cited concept in clinical research on ageing-related **cognitive** disorder. It refers generally to subclinical complaints of memory functioning in elderly people, which are judged to have a high probability of evolving towards **Alzheimer** 's disease. The identification of people at potential risk of **dementia** with a view to early therapeutic intervention is important, because it may lessen distress for both patient and family, minimise the risk of accidents, prolong...

...therapeutic intervention is also of particular interest to the pharmaceutical industry because it defines a potential consumer market for cholinesterase inhibitors, and other drugs mediating **dementia** -related **cognitive** decline, that is much larger than that for **Alzheimer** 's disease. Many research reports on MCI are being published. However, there seems to be little consensus on its conceptual basis or diagnostic algorithms. There...

... carefully considered, and that MCI should be located conceptually among the many other existing and overlapping concepts that have been applied to elderly people with **cognitive** disorders. The aims of this viewpoint are to describe the conceptual basis of MCI, to clarify its underlying assumptions and its relation to other similar...

...of standardised case identification. Finally, we look at the potential usefulness and drawbacks of developing MCI as a separate nosological entity.

Current concepts of subclinical **cognitive** impairment
Cognitive impairment without **dementia** is so common among elderly people that it has come to be thought of as an inevitable feature of the ageing process. It has, nonetheless, acquired clinical significance because of the difficulties patients may have with carrying out everyday activities. Although the range of impairments seen in populations without

dementia is extremely broad, several clinical labels have been proposed to describe this tail-end of the normal **cognitive** range (table), which have promoted the notion of a homogeneous entity. One of the earliest was benign senescent forgetfulness proposed by Kral(1) to denote...

...of remote as opposed to recent events, and awareness of memory problems. The first attempt at standardisation of formal diagnostic criteria for normal ageing-related **cognitive** change was undertaken by Crook and colleagues in 1986(2) for the National Institute of Mental Health, who developed the notion of age-associated memory...

...and colleagues(4) criticised age-associated memory impairment as being too restrictive a concept in terms of the nature of the deficit, pointing out that **cognitive** impairment in elderly people does occur in functions other than memory, and that memory impairment itself commonly occurs with other deficits. An alternative concept of ageing-associated **cognitive** decline has thus been proposed by these researchers in collaboration with the International Psychogeriatric Association and the World Health Organization.(4) Ageing-associated **cognitive** decline refers to a wider range of **cognitive** functions (attention, memory, learning, thinking, language, and visuospatial function), and is diagnosed by reference to norms for elderly people. Application of ageing-associated **cognitive** decline and age-associated memory impairment to elderly people within the general population suggests that they are distinct clinical entities, the former referring to a more severe state of impairment.(5) Within the Diagnostic and Statistical Manual IV (DSM IV)(6) a related concept of age-related **cognitive** decline has also been elaborated, which is similar to ageing-associated **cognitive** decline in that it refers to an objective decline in **cognitive** functioning due to the physiological process of ageing. Age-related **cognitive** decline remains a somewhat vague concept, which has not been given the strict operational criteria of deviation from a population norm that have been specified for age-associated memory impairment, late-life forgetfulness, and ageing-associated **cognitive** decline. Age-related **cognitive** decline is presently defined as a complaint of difficulties in recalling names and appointments or in problem-solving, which cannot be related to a specific mental problem or a neurological disorder.

These concepts are all based on a normality model; such mild **cognitive** deficits are judged to fall within the limits of normal ageing. However, may not **cognitive** deficits of this type be partly due to underlying disease, which might be differentiated from normal ageing-related physiological changes? Other concepts have been proposed, which link mild states of **cognitive** impairment to pathological states. Within the tenth revision of the International Classification of Diseases (ICD),(7) criteria are given for mild **cognitive** disorder, which refer to disorders of memory and learning and concentration. These disorders are often accompanied by mental fatigue, which must be shown by formal neuropsychological testing and be attributable to cerebral disease or damage, or systemic physical disease known to cause dysfunction. Mild **cognitive** disorder is thus construed as being secondary to physical illness or impairment, excluding **dementia**, amnesic syndrome, concussion, or postencephalitic syndrome. Mild **cognitive** disorder is also applicable to people of all ages. Early attempts to apply criteria for mild **cognitive** disorder to population studies of elderly people have been unsuccessful, which has cast doubt on the usefulness of mild **cognitive** disorder as a separate nosological entity(8) for this age group. DSM IV(6) proposed a similar entity, mild neurocognitive disorder, which encompasses not only memory and learning difficulties, but also perceptual-motor, linguistic, and central executive functions.

The Canadian Study of Health and Aging referred to " **cognitive**

impairment no **dementia** ", which is identified on the basis of neuropsychological testing and clinical examination.(9) Patients with this disorder, like those with mild **cognitive** disorder and mild neurocognitive disorder, have impairment attributable to an underlying physical disorder. Also in this group are patients with a circumscribed memory impairment, which is a modified form of age-associated memory impairment. **Cognitive** impairment no **dementia** encompasses a wider range of underlying abnormalities than mild **cognitive** disorder and mild neurocognitive disorder, including disorders such as delirium, substance abuse, and psychiatric illness, which are excluded from the ICD and DSM categories. **Cognitive** impairment no **dementia** seems to refer to elderly people only, although this criterion has not been explicitly stated.

Mild **cognitive** impairment: operational definitions and clinical status

What is the place of MCI amid these many and overlapping concepts and what can it add that is not already covered by existing terminology? MCI, like mild **cognitive** disorder and **cognitive** impairment no **dementia** , is based on a pathological model of **cognitive** change. Like **cognitive** impairment no **dementia** , it is applicable to **cognitive** impairment in elderly people only. MCI is not generally thought to be a direct consequence of systemic disease, but may be a significant risk factor for senile **dementia** , in particular **Alzheimer** 's disease. It thus seems at this time to be theoretically closest to the notion of **cognitive** impairment no **dementia** . Beyond this, specific diagnostic criteria are inconsistent. Petersen and colleagues(10) initially used the term to refer to complaints of defective memory and demonstration of abnormal memory functioning for age, with normal general **cognitive** functioning and conserved ability to carry out activities of daily living. A later definition referred to memory impairment beyond that expected for both age and educational achievement.(11) Another approach has been to define MCI in terms of early-stage **dementia** . For example Krasuki and colleagues(12) referred to **cognitive** impairment with a score of 20 or more on the mini mental state examination, and Zaudig(13) defined MCI as a score of more than 22 on the mini mental state examination, or 34 to 47 on the SIDAM (structured interview for the diagnosis of **dementia**) **dementia** scale. Others have referred to criteria based on clinical **dementia** rating scales or **global deterioration scale** scores.(14,15)

Apart from the general absence of standardised diagnostic criteria, there are two central conceptual issues relating to MCI that remain unresolved. Firstly, whether or not MCI should be confined exclusively to isolated memory impairment. Secondly, is MCI a prodrome of **Alzheimer** 's disease, or is it a clinically heterogeneous group at increased risk of **dementia** due to any cause? Petersen and colleagues(11) specified that in MCI general intellectual functioning should be preserved, and that only memory should be affected since the restriction of the impairment to mnesic abilities is what differentiates the syndrome from **Alzheimer** 's disease (in this case, why has the more precise term of mild memory impairment not been used?). Isolated memory impairment was recorded in a...

...somewhat circular. There is also the clinical problem of the non-specificity of neuropsychometric testing; difficulties on a memory task may be attributable to other **cognitive** difficulties, in particular attentional, central executive, and comprehension impairments. Other researchers have noted that patients with MCI, although having primarily memory complaints, also commonly show...

...Although there is evidence that a purely mnesic syndrome may exist,(5) such patients represent only a very small proportion (6%) of elderly people with **cognitive** deficits when the full range of **cognitive** functions is examined. Higher rates of circumscribed memory deficit (31.7% of **cognitive**

impairment no **dementia** cases) were observed within the Canadian longitudinal study,(9) but only patients with a score below cut-off on the mini mental state examination were examined, and the test battery itself consists predominantly of memory tasks.

With regard to the extent to which MCI may be a prodromal phase of **dementia** , several studies have suggested a significantly increased risk of **Alzheimer** 's disease in MCI patients, with estimates of 10% to 15% of MCI patients developing **dementia** in 1 year,(11) 40% over 2 years,(17) 20% over 3 years,(16) 30% over 3 years,(18) 53% over 3 years,(19) and...

...were, however, all based on small hospital-based series, and there is currently little evidence from representative general population studies. Risk factors for progression to **Alzheimer** 's disease derived from larger-scale studies are possession of the ApoE 4 allele, age, fine motor deficit, and low premorbid intelligence quotient.(11,15,20,21) Survival rates for MCI patients over a 7-year period were midway between those for normal elderly people and **Alzheimer** 's disease patients, with a cumulative mortality risk twice that of the general population.(22) From these studies, MCI seems to be mainly construed as a risk factor for **Alzheimer** 's disease. Although some studies have referred more generally to "**dementia** risk" without further precision, its relation to other forms of **dementia** has not specifically been examined.

General support for the notion that MCI is at least some form of neurological disorder has come from cerebral imaging...

...perfusion and left/right parietal-temporal asymmetry in MCI.(23) The observed hypoperfusion was intermediate between that found in normal people and in patients with **Alzheimer** 's disease. Patients with **Alzheimer** 's disease were found to have atrophy and lower cerebral blood flow in both medial temporal and temporoparietal regions than MCI patients, whereas MCI patients showed significant reduction in cerebral blood flow without atrophy in the temporoparietal region only.(24) Electroencephalography showed similarities between **Alzheimer** 's disease and MCI which differentiated both groups from normal elderly people on temporoparietal coherence and a and U relative power.25 These findings suggest that MCI and **Alzheimer** 's disease have similar anatomical locii, with MCI being differentiated mainly by degree of impairment, and functional, rather than structural change.

In a 3-year follow-up study, 64% of MCI patients had abnormal SPECT scans at baseline.(19) 53% of this cohort developed **dementia** , but of those only 67% had initially ...thus the positive predictive value of the scan was 50%. The researchers suggested that identification of MCI by Spect may not be useful in predicting **dementia** , although the study was based on only 27 patients, and depression may have been a confounding variable. On the other hand, progression from MCI to **dementia** was predicted on the basis of SPECT perfusion levels from four regions: the hippocampal-amygdaloid complex, the anterior and posterior cingulate, and the anterior thalamus. The researchers concluded that with semiquantitative analysis and a spatial resolution sufficient to detect perfusion in limbic structures, MCI can be differentiated from **Alzheimer** 's disease.

Conclusion

There is evidence that elderly people with subclinical **cognitive** deficit show anatomical and structural changes that can be differentiated from both normal ageing and **Alzheimer** 's disease, although these differences are predominantly quantitative. The extent of these changes is difficult to assess because case-identification criteria differ and the non-study samples are non-representative. There is also evidence that elderly people with MCI are at high risk of **Alzheimer** 's disease, although in many studies case-selection strategies are based on screening instruments for **Alzheimer** 's disease, thus introducing a significant bias

in the estimation of risk. If MCI is to survive as a viable clinical classification, increasing rigor must be introduced into its definition, case-finding criteria, and **cognitive** assessment. MCI has been defined by the tests used to measure it, and the results of these measures have then been used as validation of...

...tautology and self-fulfilling prophecy.

What does MCI offer that is not covered by the current plethora of concepts? The definition of MCI covers subclinical **cognitive** change that is potentially pathological, being a possible forerunner to senile **dementia**, but supposedly unrelated to other underlying systemic diseases. Given the small proportion of elderly people who have persistent, isolated memory impairment, perhaps MCI can be more usefully thought of as a significant deficit in any **cognitive** domain. In this case MCI would be almost identical to ageing-associated **cognitive** decline, except for the underlying assumption that it is not part of a normal ageing process. In this respect it is closer to the notion of **cognitive** impairment no **dementia**, but that term has been used in only one ageing study and currently lacks clear defining criteria. **Cognitive** impairment no **dementia** patients are also screened with a **dementia** screening test, which biases selection towards subclinical cases of **Alzheimer**'s disease. Measurement criteria for ageing-associated **cognitive** decline may be useful for the determination of MCI, with the **caveat** that underlying abnormalities that might contribute to the **cognitive** loss should be identified.

Within a research context, specification of certain neuropsychological tests for the identification of MCI may be important. This approach will at...

...associated morbidity. From a clinical viewpoint, test standardisation may be less satisfactory, since individual patients may present with a severe deficit in a subsystem of **cognitive** functioning not covered by the tests selected. In any case, neuropsychological testing procedures should be as comprehensive as possible in their assessment of **cognitive** functioning in elderly people, and should also be separate from instruments used for diagnosis of **Alzheimer**'s disease, to permit a clearer understanding of the relation between the two.

A final issue is the potential usefulness of MCI as a separate nosological entity. On the one hand, the notion that subclinical **cognitive** deficit is pathological as opposed to a normal ageing process, opens the way to active rather than palliative care. Effective pharmaceutical management may be extended...

...to meet criteria for treatment. Disease onset may thus be postponed, or perhaps even avoided. Effective treatment of MCI may modify current concepts of normal **cognitive** functioning in elderly people towards expectations of greater competence. For society, such change could affect attitudes to elderly people. For health-care provision, it could...

...states due to environmental factors risk being erroneously raised to the status of a disease. This may in turn give rise in elderly people to **cognitive** hypochondriasis or a morbid concern with occasional difficulties of no clinical importance. Does MCI really constitute a separate and homogeneous clinical syndrome or is it...

...new syndrome and related syndromes by discriminant function analysis. Such a syndrome validation analysis has not yet been carried out.

The legal implications of conceptualising **cognitive** impairment as pathological may also be complex. The pharmaceutical industry is obviously a strong driving force behind the promotion of MCI as a separate

nosological...

...a clear need for a consensus statement on the diagnosis of MCI that involves not only clinicians and researchers in the field of ageing-related **cognitive** deterioration, but also specialists in nosological classification and legal issues, who must above all identify the clinical population most likely to benefit from the application...diagnosing age associated memory impairment: proposed improvements from the field. Dev Neuropsychol 1989; 5: 295-306.

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Concept		Investigator	Criteria
test	Benign senescent forgetfulness	Kral(1)	Memory complaints
	Age-associated memory impairment	Crook et al((2)	Memory impairment shown by decrement on formal cognitive
	Late-life forgetfulness	Blackford and LaRue(3)	As age-associated memory impairment but greater decrement on 50% of a specified test battery
	Ageing-associated cognitive decline	Levy et al(4)	Impairment on any formal cognitive test
	Ageing-related cognitive decline	DSM IV(6)	Objective decline in functioning
cognitive decline	Mild cognitive decline	ICD-10(7)	Disorders of memory learning and concentration shown by testing
Mild neurocognitive decline	DSM IV(6)	Difficulties in memory learning, perceptual-motor linguistic, and central executive functioning	
Cognitive dementia	impairment no	Graham et al(9)	Circumscribed memory impairment and low MMSE score
Mild cognitive impairment	Petersen et al(10)	Complaints of defective memory, a deficit on tests, and normal general intellectual functioning	
cognitive			

Concept	Cognitive tests specified
Benign senescent forgetfulness	No
Age-associated memory impairment	No
Late-life forgetfulness	Yes
Ageing-associated	No

cognitive decline
Ageing-related **cognitive** decline No
Mild **cognitive** decline No
Mild neurocognitive decline No
Cognitive impairment no Yes
dementia
Mild **cognitive** impairment No

MMSE=mini mental state examination.

Glossary of entities designating **cognitive** impairment in elderly people without **dementia**

DESCRIPTORS: **Cognition** disorders...

18/3,K/1 (Item 1 from file: 5)
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Hierarchical complexity of tasks shows the existence of development stages

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...ABSTRACT: that performance develops. The notion of the hierarchical complexity of tasks, introduced here, formalizes the key notions implicit in most stage theories, presenting them as **axioms** and theorems. The hierarchical complexity of tasks has itself been grounded in mathematical models (Coombs, Dawes, and Tversky, 1970) and information science (Lindsay and Norman...

...highest order of hierarchical complexity on which there is successful task performance. In addition to providing an analytic solution to the issue of what are **developmental stages**, the theory of hierarchical complexity presented here allows for the possibility within science of scaling the complexity in a form more akin to intelligence.

DESCRIPTORS:

MISCELLANEOUS TERMS: **cognition** ; ...

... **developmental stages** ;

18/3,K/4 (Item 1 from file: 144)
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A theory of cognitive control, aging cognition , and neuromodulation
Aging of the brain, sensorimotor, and cognitive processes
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A theory of cognitive control, aging cognition , and neuromodulation
Aging of the brain, sensorimotor, and cognitive processes
A theory is described which links **cognitive** changes observed in normal aging to an underlying decline in the function of the dopamine (DA) system projection to prefrontal cortex (PFC). The theory **postulates** that this neural mechanism is integral to the representation, maintenance and updating of context information, and as such impacts **cognitive** control across a wide range of **cognitive** domains, including working memory, attention, and inhibition. Behavioral and brain imaging data in support of the theory are discussed, which demonstrate selective impairments in context processing among healthy older adults associated with abnormal PFC activation. These findings highlight the utility of a computational approach to **cognitive** aging. Current directions for further refinement and validation of the model are outlined.
Broad Descriptors: Neurotransmitter; Catecholamine; **Developmental stage**
; **Cognition** ; Vigilance; Acquisition process; Brain (vertebrata);
Central nervous system; Neurotransmetteur; Catecholamine; Stade
developpement; **Cognition** ; Vigilance; Processus acquisition; Encephale;
Systeme nerveux central; Neurotransmisor; Catecolamina; Grado desarrollo;
Cognicion; Vigilancia; Proceso adquisicion; Encefalo; Sistema nervioso
central